

**EXPLORING THE HOME LITERACY BELIEFS  
OF  
PARENTS WITH YOUNG CHILDREN IN NEW ZEALAND**

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The material presented in this thesis is the original work of the candidate except as acknowledged in the text, and has not been previously submitted, either in part or in whole, for a degree at this or any other University.

The research reported in this thesis was approved by the University of Canterbury Educational Research Human Ethics Committee.

## **DEDICATION**

I want to dedicate this thesis to the two women in my life, my mother and my wife – not quite the “silent majority”, but exemplary teachers in every way.

First, I want to say a very special thank you to my mum for your prayers and your encouragement. You believed in me throughout and I shall always treasure that.

Joanna, thank you so much! You lead in so many ways. You set me on this path, of not only academic learning, but also of self-discovery. You have been a constant source of inspiration. I really am looking forward to our next adventure.

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## ABSTRACT

Research has shown that parents make important contributions to their children's English literacy acquisition and that there are cultural differences in how parents approach this task. Increased immigration has contributed to a diverse society in New Zealand, with a quarter of the population foreign born, yet very little quantitative research on New Zealand parents' home literacy beliefs (PHLBs) is available.

Improving our understanding of PHLBs will assist teachers and other stakeholders to support parents of young readers, especially parents who may not speak English as their mother tongue. PHLBs have been characterized in past research as skill-based, entertainment based or an approach which may include elements of both.

The aim of this study was to explore and develop our understanding of New Zealand PHLBs. Participants in this study were 300 parents of children under the age of seven. They were the parent in the family who spends the most time with their child to promote their English literacy skills. An online questionnaire based on Anderson's (1995) *Parents' Perceptions of Literacy Learning Interview Schedule* was used to collect data. Demographic information and responses to 33 Likert-scale items related to literacy acquisition were used in quantitative data analysis. Composite high scores on the scale indicated that PHLBs aligned with an emergent approach to literacy acquisition in which fun and entertainment considerations were central. Low scores were congruent with a skills-based perspective in which parents preferred didactic teaching techniques.

Nine independent variables were used in the analyses: parent level of education, household income, parent gender and age, main home language, immigration status,

how long the parent has been helping the child and the children's gender and age. Relations between the demographic variables and parents' composite score were analysed in a correlation matrix. The predictive capacity of the variables were analysed in a hierarchical multiple regression. Analyses of variance were performed to investigate group differences in terms of language and immigrant background on measures derived from the questionnaire, including factors obtained from Factor Analyses of the current data.

The most significant predictors of parents' beliefs were their main home language (L1), how long they have been helping their child and their immigration status, which support the social nature of children's literacy acquisition within the home environment. Significant differences existed in the beliefs of parents who speak English L1, including immigrants who speak English L1, and those who speak other languages as L1. There were also significant differences in the beliefs of participants who were born in New Zealand and immigrants, as well as between parents who have been helping their children for short periods of time versus long timeframes.

Consistent with previous research, there was a large amount of variability in home literacy beliefs across parents; however, in the two new factors established from the current research, variance focused more on a 'Parent-as-Teacher' factor and there was much less variance in a 'Parent-as-Model' factor. These new factors will be discussed along with previous conceptualisations of parent/home literacy influences.

## TABLE OF CONTENTS

DEDICATION .....	iv
ACKNOWLEDGEMENTS.....	v
ABSTRACT .....	vi
TABLE OF CONTENTS .....	viii
LIST OF TABLES .....	xii
LIST OF FIGURES .....	xiii
GLOSSARY .....	xiv
<b>CHAPTER 1: INTRODUCTION TO THE STUDY .....</b>	<b>1</b>
1.1 Background .....	2
1.2 Problem Statement .....	6
1.3 Purpose of the Study .....	7
1.4 Research Questions and Hypotheses .....	8
1.5 Nature of the Study .....	8
1.6 Assumptions.....	9
1.7 Scope and Delimitations .....	9
1.8 Significance of the Study .....	10
1.9 Summary .....	10
<b>CHAPTER 2: LITERATURE REVIEW .....</b>	<b>12</b>
2.1 Theoretical Foundation .....	12
2.1.1 Literacy Terminology .....	13
2.1.2 Home Literacy Environment.....	17
2.1.3 Social Learning Perspectives .....	21
2.2 Literature Review.....	28



2.2.1 Dependent Variable under Study: Parents' Home Literacy Beliefs .....	28
2.2.2 Independent Demographic Variables under Study .....	40
2.2.2.1 Education .....	40
2.2.2.2 Household Income .....	44
2.2.2.3 Parent Gender.....	49
2.2.2.4 Parent Age.....	52
2.2.2.5 Immigration Status.....	53
2.2.2.6 Home Language .....	58
2.2.2.7 Months Helping the Child.....	62
2.2.2.8 Child Gender .....	63
2.2.2.9 Child Age .....	66
2.3 Summary .....	67
<b>CHAPTER 3: METHODOLOGY.....</b>	<b>69</b>
3.1 Variables .....	69
3.2 Research Design and Data Analysis Plan .....	71
3.3 Measure.....	73
3.3.1 Statement of Purpose .....	73
3.3.2 Development of the Measure .....	74
3.3.3 Scales and Subscales.....	75
3.3.4 Potential Bias in the Measure .....	77
3.3.5 Reliability.....	77
3.3.6 Validity .....	79
3.4 Participants and Sampling.....	79
3.5 Procedures.....	81

3.5.1 Procedures Prior to the Data Collection.....	81
3.5.2 Procedures During the Data Collection .....	82
3.5.3 Procedures After the Data Collection .....	82
3.6 Summary .....	83
<b>CHAPTER 4: RESULTS .....</b>	<b>84</b>
4.1 Characteristics of the Participants.....	84
4.1.1 Parent Level of Education.....	84
4.1.2 Household Income per Annum .....	85
4.1.3 Parent Gender.....	87
4.1.4 Immigration Status.....	88
4.1.5 Home Language .....	88
4.1.6 Child Gender .....	89
4.1.7 Parent Age.....	90
4.1.8 Months Helping the Child.....	90
4.1.9 Child Age .....	90
4.1.10 Parents' Home Literacy Beliefs.....	90
4.2 Study Results for Research Questions and Hypotheses.....	93
4.2.1 Research Question 1 .....	93
4.2.2 Research Question 2 .....	104
4.2.3 Research Question 3 .....	108
4.2.4 Research Question 4 .....	122
4.3 Additional Results.....	128
4.3.1 Comparison of English-Chinese-Other Languages .....	128
4.3.2 Comparison of NZ-born and Immigrant English Families .....	130

4.3.3 Follow-up on Variation in the Means of Factors 1 and 2 .....	130
<b>CHAPTER 5: DISCUSSION</b> .....	134
5.1 Introduction.....	134
5.2 Summary of Findings.....	135
5.3 Interpretation of Findings .....	139
5.3.1 Pedagogical Dimensions of Parents' Home Literacy Beliefs.....	139
5.3.2 Social Learning Perspectives .....	141
5.3.3 Temporal Dimension of Parents' Home Literacy Beliefs .....	148
5.3.4 Complexity and Variations in Parents' Home Literacy Beliefs .....	151
5.4 Limitations and Directions for Future Research.....	154
5.5 Conclusion .....	158
<b>REFERENCES</b> .....	163
<b>APPENDICES</b> .....	180
Appendix A: Ethics Approval.....	180
Appendix B: Permission to use PPLLIS .....	181
Appendix C: Questionnaire.....	182
Appendix D: Recruitment Email to Principals .....	196
Appendix E: Recruitment Invitation to Parents .....	197
Appendix F: Independent Variables Intercorrelations .....	198
Appendix G: Factor Analysis Scree Plot .....	199
Appendix H: Rotated Factor Solution.....	200
Appendix I: Items Included in Each Factor .....	201
Appendix J: PPLLIS Mean for Each Language.....	202

## LIST OF TABLES

<b>Table 1</b>	Examples of Terminology for Pedagogical Approaches to Teaching Literacy .....	34
<b>Table 2</b>	Relative Orthographic Depth of a Selection of European Languages .....	62
<b>Table 3</b>	Reliability Analysis for the 33 PPLLIS Items .....	78
<b>Table 4.1</b>	Descriptive Statistics for Education.....	85
<b>Table 4.2</b>	Descriptive Statistics for Income .....	86
<b>Table 4.3</b>	Descriptive Statistics for Parent Gender .....	87
<b>Table 4.4</b>	Descriptive Statistics for Immigration Status .....	88
<b>Table 4.5</b>	Descriptive Statistics for Home Language.....	89
<b>Table 4.6</b>	Descriptive Statistics for Child Gender .....	89
<b>Table 5</b>	Descriptive Statistics for the Continuous Variables .....	92
<b>Table 6</b>	Correlations for the Independent Variables and PHLBs.....	94
<b>Table 7</b>	Summary of the Hierarchical Regression Analysis .....	107
<b>Table 8</b>	Descriptive Statistics for NZ-born and Immigrant PHLBs across the Timeframes Helping their Children .....	114
<b>Table 9</b>	Descriptive Statistics for NZ-born and Immigrant PHLBs across Education Groups.....	117
<b>Table 10</b>	Descriptive Statistics for NZ-born and Immigrant PHLBs across the Children's Age Groups .....	120
<b>Table 11</b>	Summary of the Original Responses to the Items Comprising Factor 1.....	132
<b>Table 12</b>	Summary of the Responses to the Items Comprising Factor 2 .....	133
<b>Table 13</b>	Summary of the Statistical Significance of the Independent Variables.....	136

## LIST OF FIGURES

<b>Figure 1</b>	A conceptual model of the home literacy environment.....	21
<b>Figure 2</b>	Histogram of the distribution of PHLBs scores on the PPLLIS.....	91
<b>Figure 3</b>	The association between parents' level of education and PHLBs.....	95
<b>Figure 4</b>	The association between household income and PHLBs .....	96
<b>Figure 5</b>	The association between parents' gender and PHLBs.....	97
<b>Figure 6</b>	The association between parents' age and PHLBs .....	98
<b>Figure 7</b>	The association between parents' immigration status and PHLBs.....	99
<b>Figure 8</b>	The association between English L1 or Other L1 and PHLBs.....	100
<b>Figure 9</b>	The association between the number of months parents have been helping their child and PHLBs .....	101
<b>Figure 10</b>	The association between child gender and PHLBs .....	102
<b>Figure 11</b>	The association between children's age and PHLBs.....	103
<b>Figure 12</b>	Comparison of English L1 and Other L1 PHLBs.....	109
<b>Figure 13</b>	Comparison of NZ-born and immigrant PHLBs .....	111
<b>Figure 14</b>	NZ-born and immigrant PHLBs across the different timeframes that they have been helping their children, after controlling for children's age.....	115
<b>Figure 15</b>	NZ-born and immigrant PHLBs across three levels of parent education...	118
<b>Figure 16</b>	NZ-born and immigrant PHLBs across the children's age categories .....	121
<b>Figure 17</b>	Histogram comparing the views of NZ-born and immigrant parents on Factor 1, Parent-as-Model .....	125
<b>Figure 18</b>	Histogram comparing the views of NZ-born and immigrant parents on Factor 2, Parent-as-Teacher.....	127
<b>Figure 19</b>	Comparison of English, Chinese and Other language groups .....	129

## GLOSSARY

**Conventional literacy:** “Conventional literacy skills refers to such skills as decoding, oral reading fluency, reading comprehension, writing, and spelling. The use of these skills is evident within all literacy practices, and they are readily recognizable as being necessary or useful components of literacy” (National Early Literacy Panel, 2008).

**Culture:** “a complex system of concepts, attitudes, values, beliefs, conventions, behaviours, practices, rituals, and lifestyle of the people, who make up a cultural group, as well as the artefacts they produce and the institutions they create” (Liddicoat, Papademetre, Scarino, & Kohler, 2003, p. 45).

**Decile:** “Deciles are a measure of the socio-economic position of a school’s student community relative to other schools throughout the country. School deciles indicate the extent the school draws their students from low socio-economic communities” (Ministry of Education, n.d.).

**Pākehā:** A Māori word for “New Zealanders of European descent” (“The Word Pakeha,” 1966).

**Whānau:** A Māori word for “an extended family or community of related families who live together in the same area. Whānau is often translated as ‘family’, but its meaning is more complex. It includes physical, emotional and spiritual dimensions and is based on whakapapa” (Walker, 2011).

## **CHAPTER 1**

### **INTRODUCTION TO THE STUDY**

This study explored New Zealand parents' home literacy beliefs and demographic predictors of these beliefs. Parents' home literacy beliefs, activities that they engage their children in and any resources that they provide, constitute the basis of the home literacy environment within which their children first acquire language and literacy skills.

Numerous attempts have been made to construct an understanding of the approaches to the development of English literacy that are followed by different cultural and language groups, each within their own home literacy environment. These studies often compare a single group with the dominant culture. The participants in the present study were parents of children under the age of seven, who reside in New Zealand. Little is known about how New Zealand parents approach reading and writing in their homes in order to facilitate their children's language and literacy development. Published studies have often been small scale, qualitative in nature and focused on a specific ethnic group or on low-income families (McLachlan, 2010).

Teachers, principals, support staff and policymakers need accurate information to effectively differentiate instruction, provide information and develop strategies that benefit each child. A one-size-fits-all approach does not provide equitable opportunities for all children. This is equally true for parents and it becomes a crucial issue when, instead of homogenous groups of parents, families in New Zealand are becoming increasingly diverse (Statistics New Zealand, 2014).

This study aimed to extend our understanding of the New Zealand home literacy environments that parents provide for young children. Well-researched predictors such as education and income were not the best predictors of parents' home literacy beliefs. The participants' main home language, their immigration status and how long they have been helping their children, were better predictors of parents' home literacy beliefs.

### **1.1 Background**

During the 1960s and 1970s, terms such as emergent literacy by Clay (cited in Teale & Sulzby, 1986) and ecological development by Bronfenbrenner (1977) were coined. In addition, English translations of Vygotsky's work on socio-cultural theory which significantly influenced educational theory, were published (van der Veer & Yasnitsky, 2011). As a result, the main focus areas of literacy research shifted in the 1980s, to include the development of our understanding of the important contributions that families make to children's literacy acquisition. Family literacy as a domain was developed via ground-breaking research by Taylor (1983) and Heath (1983).

The home literacy environment was a new domain in which parents' social interactions, home literacy beliefs, habits, expectations, activities and resources to promote their children's literacy were acknowledged (Burgess, 2011; Snow, Burns, & Griffin, 1998; Weigel, Martin, & Bennett, 2006a). Differences in families' approaches due to culture, language, education, income, etc. were investigated, as well as their impact on children's literacy outcomes (Seymour, 2005).

Increased mobility and a number of other reasons have contributed to large numbers of migrants from non-English speaking backgrounds settling in Western countries



such as the United States of America, Canada, the United Kingdom and Australia where English is the official language, during the second half of the 20th century. Diversification of these populations prompted research into how these immigrants settled and acculturated, as well as how their children adapted to learning English and how they coped with learning in English (McBride-Chang, 2004).

The majority of immigrants in New Zealand, have for decades come from other English speaking countries such as Great Britain, Ireland and Australia (Butcher, 2004). They shared English as their main language, but also had similar customs, traditions and values. However, since the promulgation of the 1987 Immigration Act, more and more immigrants from predominantly non-English speaking backgrounds have arrived in New Zealand; Mandarin and Cantonese speaking immigrants from China; Hindi speakers from India; Afrikaans speaking South Africans, as well as immigrants from the Philippines, Fiji and Samoa made New Zealand their home (Statistics New Zealand, 2014; Ward & Masgores, 2008; Wilkinson, 1998). Within a relatively short timeframe of about 30 years, a predominantly bilingual and bicultural country in which English and Māori were dominant, had to start acknowledging and adapt to a multiplicity of other languages and cultures.

New insights into early literacy and similar demographic changes in countries such as the United States of America and Canada, for example, led to research into literacy acquisition that produced landmark publications such as *Preventing Reading Difficulties in Young Children* (Snow et al., 1998), *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (National Reading Panel, 2000), *Developing*

*Early Literacy: Report of the National Early Literacy Panel* (National Early Literacy Panel, 2008) and in New Zealand, the *Report of the Literacy Taskforce* (Ministry of Education, 1999). Evidence started to emerge about foundational early literacy skills that were deemed crucial to children's ultimate academic success. Specific skills, for example, alphabetic knowledge and phonological awareness were early literacy skills that developed when children are very young (McLachlan & Arrow, 2014). The emergent literacy construct places these early literacy skills on a continuum that starts at birth (Teale & Sulzby, 1986).

The important role that parents play in their children's language and literacy development is recognised in both the family- and emergent literacy domains. It would be unreasonable to expect parents to have the same specialist knowledge and understanding of early literacy as teachers. However, it is likely that parents' home literacy views are influenced by their children's teachers, if their children are of school-going age. Parents of children who are not yet attending early childhood centres or schools will have to rely on different sources of information or may instinctively use their own past experiences of literacy instruction in school. Parental involvement in their children's education takes different forms and degrees (Epstein & Becker, 1982) and children arrive at school with varying abilities and skills (McNaughton, 1995). Cultural and language barriers sometimes prevent minority parents from obtaining information from teachers (Hornby & Lafaele, 2011).

Children's outcomes can be traced back to mainly teachers' instruction, but parents' home literacy activities may also contribute. According to the home literacy model developed by Sénéchal and LeFevre (2002), specific outcomes are associated with

specific home literacy activities. For example, informal storybook reading activities improve children's vocabulary or language skills, whilst parents who formally teach their children, promote early reading skills such as letter knowledge (Sénéchal, LeFevre, Thomas, & Daley, 1998). Lynch, Anderson, Anderson, and Shapiro (2006) showed that parents' home literacy activities are associated with their home literacy beliefs. The question that arises from this relationship is what factors are related to parents' home literacy beliefs.

Research into demographic factors within the home literacy environment that are related to parents' home literacy beliefs and activities, has mostly focused on household income and parents' level of education or a combination of these two, termed socioeconomic status (SES). Disadvantaged families with low levels of education or low literacy (Fitzgerald, Spiegel, & Cunningham, 1991) and income (Purcell-Gates, 1996; Sonnenschein et al., 1997) have been shown to have different beliefs and engage their children in different activities than more affluent families. Other predictors have also been identified (Weigel, Martin, & Bennett, 2005), for example, ethnicity (Van Steensel, 2006), as well as language and immigration status (Leseman & de Jong, 1998). J. Anderson (1995b) investigated a combination of cultural and language differences in Canadian parents' home literacy beliefs with Lynch et al. (2006) further developing Anderson's study to include education.

Views on the acquisition of emergent and early literacy in general, but especially reading, have given impetus to an ongoing debate about the best ways to teach beginning reading. This disagreement between teachers, policymakers and academics is also present in parents' approaches and becomes evident in their home literacy

practices (Sénéchal & LeFevre, 2002; Sénéchal et al., 1998). Two main approaches to early literacy instruction can be used, whilst a third, a balanced or mixed approach has been advocated for by researchers who support differentiated instruction in which the needs of individual children are placed first, instead of a one-size-fits-all approach (Adams, 1990; Snow et al., 1998). The first approach focuses on phonics, and the second, on whole language/whole words, even though many different terms are used to describe these approaches. The phonics approach is also known as a traditional or skills-based approach. The whole-language/whole-word approach is holistic and follows a constructivist, child-centred methodology in which the emphasis is placed on the meaning of words and large chunks of text such as sentences rather than smaller elements such as letters, sounds or syllables (Lynch et al., 2006; Reyhner, 2008). McBride-Chang (2004) stated that a natural process leads to learning of a language, but reading and writing require “explicit instruction or specific practice” (p. 119).

## **1.2 Problem Statement**

Statistics New Zealand (2014) reported that a quarter of the population was foreign born at the time of the 2013 census. Parents born overseas may have very different home literacy beliefs from the mainstream views of parents born in New Zealand. Thus, there is uncertainty as to how closely parents’ home literacy beliefs are aligned with contemporary New Zealand Ministry of Education policy and teachers’ pedagogical approaches. Moreover, both early childhood and primary school instructional approaches have been identified as not including sufficient systematic phonics instruction (McLachlan & Arrow, 2014; Tunmer & Chapman, 2015; Zhang,

2015).

Parents are considered their children's first teachers and parental involvement in their child's education is widely encouraged (Aram, 2010; Bingham, 2007; Epstein & Becker, 1982). Biddulph (2013) warned of the potential harm if there is discontinuity between teachers' pedagogy and parents' home literacy practices.

Providing support to parents, keeping track of changes in parents' perspectives, especially in minority and disadvantaged communities, as is currently done by the National Literacy Trust in the United Kingdom, for example, becomes important in rapidly changing societies (National Literacy Trust, 2017). However, very little is known about New Zealand parents' home literacy beliefs; especially parents of children who are under the age of five and not yet in primary school. McLachlan (2010) and Cullen (2008) concurred that early childhood education (ECE) research in New Zealand in general, is limited in scope and volume. McLachlan (2010) also pointed out that such research is usually qualitative with small samples as a consequence. With such limitations, there is a need to improve our understanding of parents' home literacy beliefs and predictors thereof.

### **1.3 Purpose of the Study**

The overarching purpose of the study was to extend our empirical knowledge of New Zealand parents' home literacy beliefs through an analysis of quantitative data. This study included various analyses of ecological or demographic factors to construct such an overview of parents' home literacy beliefs. The associations between these factors and parents' home literacy beliefs were evaluated as well as their predictive capacity. Follow-up analyses were performed to further investigate group differences.

## **1.4 Research Questions and Hypotheses**

Research questions 1 and 2 were designed to satisfy this study's initial main aims to explore the relations between nine independent, ecological variables and parents' home literacy beliefs and the predictive capacity of these independent variables.

Regression analysis, used to answer research question 2, showed that only five of the predictors were statistically significant. Research question 3 was added to the study to further investigate these significant predictors. Each of the statistically significant predictors was used to form a hypothesis. Due to significant differences in the beliefs of groups, research question 4 was added to compare immigrant and New Zealand-born parents' overall home literacy beliefs and their beliefs on sub-sections of the questionnaire.

## **1.5 Nature of the Study**

A quantitative approach was used to survey 300 New Zealand parents of children under the age of seven. Participants completed an online questionnaire. Demographic data were collected, along with 33 questions that were used to determine parents' home literacy beliefs. Correlation and hierarchical multiple regression were used to explore the relationships between and the predictive capacity of nine independent variables (parent education, household income, parent gender, parent age, immigration status, parent home language, child gender and child age) and parents' English home literacy beliefs. Group differences were then explored by doing independent samples *t*-tests, between-groups analysis of variance and analysis of covariance. A factor analysis and follow-up analyses of variance were performed to further compare groups on two significant areas of the questionnaire.

## **1.6 Assumptions**

The present study extends previous research by investigating parents' home literacy beliefs on a scale ranging from skill-based views, to mixed views, to holistic perspectives. Three assumptions were made. The first assumption is that children acquire emergent literacy skills via social interactions within the home literacy environment from various individuals, but mostly their parents (A. Anderson, Anderson, Hare, McTavish, & Prendergast, 2015; McLachlan, Nicholson, Fielding-Barnsley, Mercer, & Ohi, 2012; Rogoff, 2014). The second assumption was that an association exists between parents' home literacy beliefs and their home literacy practices. Parents' formal and informal activities as explained by Sénéchal et al.'s (1998) home literacy model, are determined by their home literacy beliefs (DeBaryshe, 1995; Lynch et al., 2006; Weigel et al., 2006a). The third assumption was that a balanced approach to literacy instruction, which includes elements of both holistic and skills-based teaching, leads to differentiation according to the individual needs of each child, thus better outcomes (Arrow & Tunmer, 2012; McBride, Snow, Kucirkova, & Grøver, 2017; McNaughton & Jesson, 2017; National Reading Panel, 2000).

## **1.7 Scope and Delimitations**

The focus of this study was on parents of children under the age of seven, who were living in New Zealand at the time of the study. New Zealand-born, immigrant parents and sojourners were all invited to participate in the study. Invitations were distributed to major cities and rural areas to maximise the size and representativeness of the sample. Many participating families use languages other than English, but parents'

home literacy beliefs with regards to specifically English literacy, was evaluated.

### **1.8 Significance of the Study**

Parental involvement and ensuring a print rich home literacy environment have been shown to facilitate children's language and literacy development. A good understanding of variations in parents' home literacy beliefs within New Zealand will help teachers, support staff and policy makers in various ways. They will be able to provide parents, families and *whānau* with differentiated guidance and pertinent information rather than general suggestions. Materials, curriculum and pedagogy can be designed to differentiate instruction. Professional development for early childhood educators can be designed to create a better understanding of early literacy. Similarly, costly family literacy programmes and interventions can be tailored according to the differential needs of parents, either by focusing on their language or their cultural group. Overall, this may help to narrow the current achievement gap between those students who excel in literacy and those who struggle to read and write. Attaining proficient literacy skills and ultimately, good academic results, can only benefit society as a whole.

### **1.9 Summary**

The home literacy environment, even though it is seen as a complex concept, consists at a minimum of parents' home literacy beliefs, activities and resources. The focus in this study was limited to parents' home literacy beliefs and ecological predictors of those beliefs.

In the next chapter, the theoretical framework will show that social learning



perspectives provide connections for the emergent and family literacy constructs. The literature review focuses on factors that may be associated with parents' home literacy beliefs. These include education, household income, parents' age and gender, immigration status, main home language, the timeframe they have been helping their child to develop English literacy skills and their child's gender and age. In Chapter 3, the methodology will include a discussion of the participants in the study, the measure for parents' home literacy beliefs and the procedures followed. Findings are then presented in Chapter 4 and finally, a discussion follows in Chapter 5, which includes theoretical and practical implications. Limitations, future directions and a final summary conclude the thesis.

## **CHAPTER 2**

### **LITERATURE REVIEW**

The theoretical foundation first introduces the wider context of this study, namely early literacy. It then goes on to discuss more specifically how the home literacy environment functions as a framework for the social aspects of parents' beliefs about their children's literacy acquisition. Further discussion in the literature review then focuses on research that pertains to the relationships between nine demographic and ecological variables and parents' home literacy beliefs.

#### **2.1 Theoretical Foundation**

Multiple theories have been advanced to develop our understanding of language and literacy acquisition, but with Clay's (1967) introduction of the emergent literacy construct, along with the translation of Vygotsky's (1978) works into English, the field of early literacy research opened up a whole new era of investigation into the social aspects of children's literacy development prior to schooling, especially in their homes. Different fields of study, including philosophy, sociology, education and psychology, have contributed to a theoretical framework that underpins language and literacy teaching and learning (Tracey & Morrow, 2006). Contemporary literacy research has also been influenced by neurobiological research (McLachlan et al., 2012) somewhat to the detriment of the socio-cultural approach (A. Anderson et al., 2015). However, the socio-cultural model continues to be relevant, because it still "challenges us to widen our perspective beyond that of the individual child and of knowledge and meaning in isolation (Hamer, 2005, p. 70). Various theories are

relevant to the present study, because of its attempt to provide an overview of New Zealand parents' home literacy beliefs. This study will therefore be guided by what Tracey and Morrow (2006) call the "social learning perspectives" (p. 100), but it is necessary to first address the elements of the emergent and family literacy models, because the focus here is on the early literacy years; specifically on parents with children under the age of seven.

### **2.1.1 Literacy Terminology**

This study has a narrow focus on emergent and early literacy. Marie Clay, an early literacy researcher in New Zealand, started using the term emergent literacy to describe literacy skills and knowledge in respect of written text that young children acquire prior to reaching the conventional literacy stage when they can read with a high level of fluency (Rhyner, Haebig, & West, 2009; Tracey & Morrow, 2006; Van Kleeck & Schuele, 2010).

A definition of emergent literacy that is often quoted in the research literature was proposed by Whitehurst and Lonigan (1998): "the skills, knowledge, and attitudes that are presumed to be developmental precursors to conventional forms of reading and writing and the environments that support these developments" (p. 849). Central elements of emergent literacy according to this definition are its focus on both, reading and writing skills as suggested by Teale and Sulzby (1986), as well as the inclusion of the home environment.

Definitions of literacy have evolved over the years to include changes brought about by the increasingly pervasive role of technology in literacy acquisition (Kennedy et al., 2012; Spedding, Harkins, Makin, & Whiteman, 2007). The present study uses

Anderson's (1995b) *Parents' Perceptions of Literacy Learning Interview Schedule* (PPLLIS) as measure and the emphasis is on reading, writing and general literacy.

Thus, the definition of literacy used in this study is basic and limited to reading and writing, which corresponds with Teale and Sulzby's (1986) assertion that emergent literacy comprises both reading and writing, that they are connected and that they develop at the same time (Gunn, Simmons, & Kameenui, 1995).

Rhyner et al. (2009, pp. 9-26) explained three approaches to emergent literacy. The first is a "developmental perspective", which is focused on the processes involved and the progressions in children's acquisition of literacy knowledge. A "components perspective" emphasises what children learn about reading and writing, for example, phonological awareness or concepts about print. The "child-and-environmental influences perspective" addresses the influences of the child and his or her environment. Of importance for this study, is the influence of parents' literacy beliefs on the development of their child's emergent literacy knowledge and skills.

Emergent literacy is seen as literacy learning on a continuum, which begins at birth and continues until a child acquires a level of conventional literacy competency (Rhyner et al., 2009; Tracey & Morrow, 2006; Whitehurst & Lonigan, 1998).

Children reach conventional literacy at different ages, so that emergent literacy "refers to a functional level of performance rather than a chronological age" (Tracey & Morrow, 2006, p. 85). The National Early Literacy Panel (2008) identified skills such as "decoding, oral reading fluency, reading comprehension..." (p.vii) as evidence that children have attained levels of conventional literacy. They also use alternative names for emergent literacy, such as "precursor, predictive [or] foundational... skills" (p.vii).

Rhyner et al. (2009) referred to uncertainty surrounding the end of the emergent literacy stage. Tracey and Morrow (2006) suggested third grade (in the USA) as a general guideline for when children attain conventional literacy skills.

Only parents of children under the age of seven were selected for the present study, despite Tracey and Morrow's statement that emergent literacy should not be tied to age. Children in New Zealand, start school from the age of five (Arrow & McLachlan, 2014), which means that the majority of the participants' children would have reached the end of year two and therefore have reached the conventional literacy stage or were about to reach the stage at the time when parents completed the questionnaire. The main motivation for selecting age seven as the cut-off point was to compare the views of parents of children younger than five with those who have children older than five. This comparison had the potential to identify any effect that teachers may have on parents' home literacy beliefs when their children start formal schooling.

The second component of Whitehurst and Lonigan's (1998) definition is the environment in which literacy develops, which in this instance is the home, family or whānau (Māori for extended family group or community). Rhyner et al. (2009) summarised the elements of the environment in which children acquire literacy as "physical settings, people, materials and literacy experiences and opportunities" (p. 23). In this study, the focus was narrow; it was specifically on the dyadic relationship between the parent who spends the most time with the child to promote literacy and the child who is acquiring emergent literacy. The physical setting was limited to the children's homes.

Taylor (1983) introduced the term family literacy in reference to "the continuously

diffuse use of written language in the ongoing life of the family” (p. 9), but over time, family literacy has grown to include not only the ways literacy is used within families, but also literacy programmes or interventions to facilitate children and parents’ literacy skills (Paratore, 2005; Rodríguez-Brown, 2011). Cairney (2002) has questioned the accuracy of the term; he asserts that family literacy research often disregards families’ priorities. A more recent definition by McLachlan et al. (2012) limits family literacy in the context of their research to “the social and cultural practices associated with written text” (p. 49) and they place emphasis on the fact that “family literacy refers to research which focuses on literacy practices within family settings” (p. 49). The definition of family literacy in the present study aligns with the latter definition, because it is also narrowly defined to refer to literacy use within the family. This corresponds with the environmental component mentioned above in Whitehurst and Lonigan’s (1998) definition of emergent literacy. Tracey and Morrow (2006) pointed out that “Family Literacy Theory overlaps with Emergent Literacy Theory regarding the ways in which at-home experiences contribute to children’s literacy success” (p. 89). Parental involvement may negatively influence children’s literacy acquisition if parents are not informed due to discontinuity or mismatches between literacy practices in the home and school (Biddulph, 2013; P. A. Edwards, 2003; Paratore, 2005; Rodríguez-Brown, 2011; Van Kleeck & Schuele, 2010). Parents’ beliefs and activities will be further discussed in the section on parents’ home literacy beliefs.

The exchanges of information between teachers and parents are relevant to this study. Schools and teachers provide parents with information in respect of how children

become literate (Tompkins, 2010). This process has the potential, and indeed the objective, according to Cairney (2002), to influence parents' family literacy beliefs and activities.

### **2.1.2 Home Literacy Environment**

The home literacy environment (HLE) provides a nexus for the aspects of family and emergent literacy discussed above — a place where parent and child come together to develop the child's language and literacy abilities. Hattie (2012) calculated a relatively large effect size of .52 for the HLE on children's academic achievement or outcomes, which makes the HLE an important area of study for literacy acquisition. Its importance can also be discerned from a relatively recent statement by C. M. Edwards (2014), in which she surmised:

That the best predictor for later reading development is the quality of the home environment... Continuing to examine different aspects of the home environment may provide crucial information with respect to literacy development in the earliest stages of life (p. 57).

Paradoxically though, despite its important contribution to children's language and literacy development, a problem arises, because there is no consensus about exactly what the HLE is. Burgess (2011) stated that "the HLE is not a unitary construct, but is composed of a variety of attitudes, resources, and activities which are inter-related, but which may influence different aspects of literacy development" (p. 447). Burgess, Hecht, and Lonigan (2002) found relationships between different conceptualisations of the HLE and outcomes, but variations in conceptualisation also led to differences in the strength of the association. Lehl, Ebert, and Rossbach (2013) also noted that there

is little agreement on a definition of the HLE. They identified single-item approaches and others that have up to 10 different dimensions of the HLE (p. 38). Some examples of studies with a broad conceptualization of HLE include “a combination of home literacy activities and contextual variables (e.g., demographic characteristics), child characteristics (e.g., temperament), mother-child interactions (e.g., maternal responsiveness), and parent-child joint activities (e.g., watching TV)” (Manolitsis, Georgiou, & Tziraki, 2013, p. 693).

Van Steensel (2006) distinguished between qualitative and quantitative HLE research. He pointed out that qualitative research, which is often ethnographic in nature, have broad conceptualisations of the HLE and is consequently limited by small sample sizes and lacks generalisability. The focus of quantitative studies on the other hand is narrow and usually limited to a single aspect of the HLE at a time, such as the well-researched activity, shared storybook reading (Van Steensel, 2006). The present study follows a quantitative approach with an emphasis on parents’ home literacy beliefs.

Sénéchal and LeFevre (2002) research interests centred around home literacy activities and they proposed the Home Literacy Model in which activities are characterised as formal or informal after a longitudinal study with 168 children. Formal activities are related to a didactic approach, whilst informal home literacy activities are equivalent to a constructivist, child-centred approach. They found that parents who engage their children in informal activities such a shared storybook reading, develop their children’s oral language skills. Formal activities such as teaching with flashcards where the emphasis is on the text, promote decoding skills. An important finding from their work is that different activities promote different



language and literacy skills. Informal activities advance children's range of vocabulary, whereas formal literacy activities involving direct teaching by the parent develop children's early literacy skills. Martini and Sénéchal (2012) reported that formal teaching activities do not improve children's oral language skills and that by the same token informal book reading does not develop children's early literacy skills. Sénéchal (2006) extended the HLM by testing French-speaking parents, thus confirming that the model also applies to parents who speak a different home language. The HLE model was later re-evaluated and Martini and Sénéchal (2012) acknowledged that a more complete version of the home literacy model should include "parental expectations and parental beliefs about literacy" (pp. 183-184). Similar benefits were highlighted by Kirby and Hogan (2008) who proposed that informal shared storybook reading may promote a "culture of reading" (p. 112)" and it may develop precursor and basic literacy skills.

Much of the research has looked at activities, especially shared book reading, and to what extent it supports children's language and literacy acquisition. Less is known about parents' home literacy beliefs. Belief systems have a mediating effect on home literacy behaviours or activities and parents' beliefs with regards to the skills that their young children require will guide their activities (Sonnenschein et al., 1997; Sonnenschein, Brody, & Munsterman, 1996). Stipek, Milburn, Clements, and Daniels (1992) also established that an association between parents' home literacy activities and their home literacy beliefs exists. They distinguished between two main teaching methodologies that parents follow and labelled them "child-centered and didactic approaches" (p. 293). Yet another view of activities was advanced by Hulme and

Snowling (2013) who identified activities by parents aimed at promoting decoding as opposed to activities that are focused on meaning.

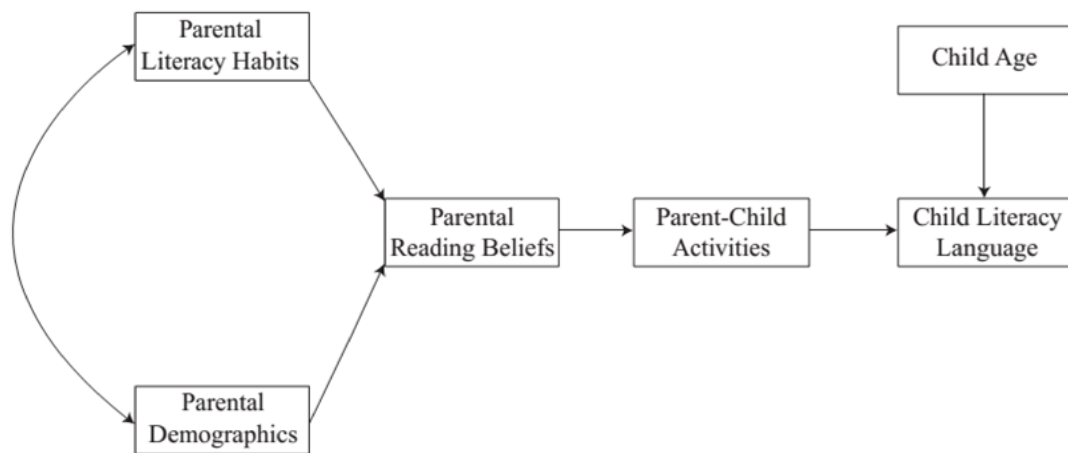
J. Anderson (1995b) and Lynch et al. (2006) investigated variations in Canadian parents' home literacy beliefs. They used the same dual approach to beliefs as Stipek et al. (1992) and Sonnenschein et al. (1997), as well as the approach by Sénéchal and LeFevre (2002) to activities. They classified beliefs differently, as congruent with either an emergent, constructivist approach or with a traditional, skills-based approach to literacy.

Weigel et al.'s (2006a) operationalisation of the HLE also included beliefs. They concluded that "parental reading beliefs were positively associated with parent-child literacy and language activities in the home" after studying 85 families (p. 357). Their work tested and extended DeBaryshe's (1995) model which focused on children's oral language development. Weigel et al.'s (2006a) study was also strengthened by the fact that it was longitudinal. The components that they identified for the model were habits, demographic factors, reading beliefs and activities. The model is represented in Figure 1.

Including parents' home literacy beliefs (PHLBs) is further supported by Rhyner et al.'s (2009) "child-and-environmental influences perspective" (p. 21), which includes parental influences on the child's emergent literacy acquisition. This perspective is based on McNaughton's (1995) "socialisation model of emergent literacy" (p. 2) and Wasik and Hendrickson's (2006) model in which they included both parents and child characteristics. They identified three important parental characteristics that may impact on children's literacy acquisition: culture and ethnicity, parental beliefs and

socioeconomic status (pp. 158-159).

From the above discussion of emergent and family literacy, as well as the home literacy environment, it becomes clear that parents have an important role as teacher-tutors that may contribute to their children's interest and success. Literacy acquisition can be approached from the child's point of view and thus cognitive science may feature strongly, but in this study the focus is on the parents' perspectives. The interactions between parents and children are by and large determined by parents' home literacy beliefs and are social in nature. In the next section the theoretical framework will therefore be discussed in terms of three social learning perspectives: socio-cultural, social constructivist and social learning.



*Figure 1*

A conceptual model of the home literacy environment (Weigel et al, 2006, p. 359). Reprinted with permission.

### **2.1.3 Social Learning Perspectives**

With the introduction of the emergent literacy construct, the contributions of out-of-school literacy practices to the development of children's language and literacy skills

were recognised. Various theories increasingly highlighted the important influence that society and culture (Bourdieu & Passeron, 1990), the family (Heath, 1982; Taylor, 1983) and the environment (Bronfenbrenner, 1986) exert on language and literacy acquisition in young children in out-of-school contexts. Silinskas, Leppänen, Aunola, Parrila, and Nurmi (2010) stated “that the terminology varies widely” (p. 62) with regards to research into parents’ teaching, but the commonality is an approach to literacy rooted in a social paradigm. Rogoff (2014) added the proviso that there is the assumption that children acquire literacy skills via social interactions with parents, grandparents, siblings and carers in the home environment, as well as teachers in early childhood centres and schools.

The reading readiness perspective that children are ready to start learning literacy skills when they reach a certain age, the “mental age of six and a half years” quoted by Van Kleeck and Schuele (2010, p. 347), prevailed for much of the twentieth century (Marsh, 2010; Rhyner et al., 2009). During the 1970s and 1980s there was a departure from this approach to literacy development as it was being regarded as a social endeavour. Tracey and Morrow (2006) use the term “social learning perspectives” (SLPs) to group together “several different theories, all of which emphasize the central role of social interaction in the development of knowledge and learning” (p. 100). These social theories recognise the influence of different factors, especially language and culture, on emergent and family literacy. They provide a framework in which literacy is regarded as social practice (Anning, Cullen, & Flear, 2009; Cairney, 2002; McLachlan et al., 2012). Three of these theories that are directly relevant to this study are discussed, namely Socio-Cultural Theory, Social

Constructivist Theory and Social Learning Theory.

*Socio-Cultural Theory* “emphasizes the roles of social, cultural, and historical factors in the human experience” (Tracey & Morrow, 2006, p. 104). This theory, or Cultural-Historical Theory as it has more recently become known (Anning et al., 2009), is based in large part on the work of Bronfenbrenner (1977, 1986) who proposed an ecological systems model of human development and Au’s (1998) development thereof to include the effects of culture on children’s development. The term socio-cultural theory will be used in this thesis because central to the argument here is the social and cultural aspects of PHLBs. Bronfenbrenner’s (1977) model of the overall environment envisaged children’s development taking place within four systems. He identified these as the micro–, meso–, exo– and macrosystems of influence (p. 513).

*Microsystems* are the most intimate, immediate and prominent of the systems where children have direct reading and writing experiences. Bronfenbrenner (1977) described it as the

complex of relations between the developing person and environment in an immediate setting containing that person (e.g., home, school, workplace, etc.). A setting is defined as a place with particular physical features in which the participants engage in activities in particular roles... (p. 514).

For the present study, this setting is the home or family literacy environment. The “developing person” refers to the child, but parents, as children’s first teachers, spend a significant amount of time in the early years with their children. The parent in the family who spends the most time with the child to promote his/her English

proficiency was invited to participate in this study. More often than not, this will be the mother (Reay, 2005), but fathers also contribute to their children's literacy development (C. E. Baker, 2013; Nicholas & Fletcher, 2011). Parents' beliefs will be affected by various demographic factors within each specific home literacy environment and the objective here is to identify which of these factors are important determinants of parents' home literacy approaches.

The second of the "nested" systems is the *mesosystem*, which consists of the interrelations between parents and others with the most important of these, the child's teacher, if the child is already attending school (McNaughton, 1995). "The best example of a mesosystem in the context of children's literacy development is the parent-teacher relationship" (McBride-Chang, 2004, p. 16). When parents' and teachers' beliefs about literacy development converge, there is a higher chance that the child will benefit from the activities that parents engage in, within the home environment. Significant others might also include extended family members and the community/whānau (Hamer & Adams, 2003).

Parents' views are also affected by environments external to the family, the *exosystem*. Bronfenbrenner (1977) included formal and informal social structures in this system (p. 515). Such systems will affect PHLBs, but this is a "direct one-way effect" (McBride-Chang, 2004, p. 6). Education systems and policies are likely to affect parents' beliefs, for example, when children should start learning to read and write (McBride-Chang, 2004; Seymour, 2005).

The "*macrosystem* refers to the overarching institutional patterns of the culture or subculture, such as the economic, social, educational, legal, and political systems..."

(Bronfenbrenner, 1977, p. 515). McBride-Chang (2004) noted examples such as “cultural expectations of achievement, and language(s) and orthography(ies) to be learned” (p. 6). She also observed that the demarcation between the systems is not always clear and that they continually impact on each other. She used the example of how culture may influence an education system, with the former representing an exosystem and the latter a macrosystem (p. 7).

Bronfenbrenner (1986) later added the *chronosystem* to account for the influence of time on children’s development. Families are dynamic and they are affected by change over time (McNaughton, 1995). Passage of time is of particular relevance for this study and two time-related predictor variables were included in this study. Time has the potential to affect PHLBs in terms of children’s age and the length of time that parents have been helping their children to develop literacy skills. Recognising that HLEs and PHLBs are dynamic and that both may change over time, however does not mean that they indeed do change. This applies to parents’ beliefs as well—they have the potential to change over time, but they may also remain the same.

One of the foundations for Tracey and Morrow’s definition of Socio-Cultural Theory cited above is Au’s (1998) proposition that apart from the social nature of literacy acquisition, the role of culture must not be underestimated. J. Anderson (1995b) accepted that “literacy is a socio-cultural phenomenon” (p. 395). Of its importance for PHLBs, he went on to refer to work done by Marie Clay in New Zealand, that “the meanings ascribed to literacy, the ways in which literacy is learned and taught and the literacy activities engaged in by different cultural groups are determined by the values and beliefs held by members of these groups” (p. 395).

*Social Constructivist Theory* originated from Vygotsky's (as cited in Tracey and Morrow, 2006) proposition that children learn or construct knowledge through their social and cultural interactions with others, especially caregivers, which includes oral language (Hull & Schultz, 2001). Within the HLE, interactions with parents, siblings and extended family members, as well as peers and teachers contribute as was shown by the role that the mesosystem plays. Three other central elements of the social constructivist theory are the roles of "sign systems, the zone of proximal development (ZPD) and scaffolding" (Tracey & Morrow, 2006, pp. 108-109). The Social Constructivist Theory may easily, but erroneously, be viewed from a perspective that it refers exclusively to children, but the inclusion of the ZPD and scaffolding constructs also recognise the involvement of parents. The ZPD is the level of development a child can achieve with adequate and competent support from a parent, whereas without the parent's support, the child will not reach the same achievement independently (G. S. Morrison, 2012). Vygotsky called this support and assistance provided by parents "scaffolding" (G. S. Morrison, 2012, p. 136). Morrow (2012) explained that the scaffolding process includes an element of modelling during which parents show how a task is done, for example how to hold a crayon to write a letter. These constructs imply that parents will assume the role of teacher to some degree, which corresponds with a traditional, skills-based approach.

Another relevant contribution by Vygotsky is the "semiotic mediation" (Tracey & Morrow, 2006) provided by "sign systems [which] include a culture's language, writing, and counting systems" (pp. 108-109). Children learn mostly about these systems from their parents in their early years of development. In reference to



Vygotsky's approach, John-Steiner and Mahn (1996) suggested that parents may utilise all kinds of tools, such as computers for example, in activities with their children. This again implies that parents will rely on an instructional role and the authors point out that it is likely that parents will initiate such activities, whereas it is more likely that children will take the initiative to request entertainment activities such as storybook reading.

*Social Learning Theory*, or *Social Cognitive Theory* as it was later renamed, was developed by Bandura and is a "general theory of human behaviour [that] combines features of Behaviourism with those of social learning" (Tracey & Morrow, 2006, p. 111). Furthermore, they claimed that Bandura recognised the notion of "vicarious learning (p. 111), which posits in the context of this study, that children learn literacy skills by observing their parents. Parents act as "models", especially by demonstrating or modelling reading and/or writing behaviours, which was also recognised in Vygotsky's Social Constructivist Theory. Tracey and Morrow (2006) explicitly stated that "modeling and observational learning are cornerstones of the field of emergent literacy (p. 112). The social interactions that occur between parent and child may include modelling behaviours, which may be related to direct instruction. Anderson noted that parents from different cultural groups displayed different opinions in respect of modelling and demonstrating literacy in the home environment (J. Anderson, 1994, 1995b). European-Canadians recognised the value of acting as role models, but parents from other cultural groups were less inclined to model literacy behaviours. Modelling is not just limited to instruction or teaching. A print rich environment is important for children and parents may also model behaviours

indirectly, such as enthusiasm for reading (Schwanenflugel & Knapp, 2015). Tracey and Morrow (2006) concluded that the social learning theory “is not one that is frequently seen in framing reading research [but] the theory has had a large and lasting impact on children’s literacy learning both at home and in school” (p. 113).

## **2.2 Literature Review**

The literature review will first focus on the dependent variable in the study, namely parents’ home literacy beliefs (PHLBs). After a general discussion of research on home literacy beliefs, the New Zealand context will be assessed and finally, research pertaining to each of the nine independent variables (parent level of education, household income, parent gender and age, parent immigration status, parent’s main home language, number of months helping the child, child gender and age) will be reviewed.

### **2.2.1 Dependent Variable under Study: Parents’ Home Literacy Beliefs**

As the elements of the aforementioned theoretical framework were developed, they gained more prominence in early literacy research during the final two decades of the twentieth century. Emergent literacy development within the HLE was scrutinised for its effect on children’s literacy outcomes. Parents’ home literacy resources, such as the number of books (Payne, Whitehurst, & Angell, 1994), types of and variation in activities (Shapiro, Anderson, & Anderson, 1997) and frequency of book reading (Sénéchal, 2006) were explored. Parents’ literacy beliefs were investigated, but not to the same extent as their activities, despite the evidence mentioned above that PHLBs are associated with their activities. PHLBs underpin home literacy activities and may determine how many resources parents collect, how often they read to/with their

children, or even what types of activities they will engage in to promote their children's literacy development, if they decide to be involved at all. Weigel et al.'s (2006a) model of the HLE (Figure 1) shows that home literacy activities follow on from, or are guided by PHLBs. A similar conceptual model, which showed the influences of family income and parental education on PHLBs and expectations, and ultimately children's achievement, was presented by Davis-Kean (2005). She also used control variables such as child age and gender.

PHLBs can be conceptualised as any combination of beliefs, attitudes (Hancock, 2006), cultural values (McBride-Chang, 2004), goals and expectations (Martini & Sénéchal, 2012) and parenting style (Bingham, Jeon, Kwon, & Lim, 2017). For the purposes of this study, PHLBs are narrowly defined as “parents’ perceptions of literacy acquisition” including reading, writing and general literacy (J. Anderson, 1994, p. 168), because Anderson’s measure for PHLBs has also been used in the present study. The present study only focuses on parents’ English home literacy beliefs. References to other studies are specifically with regards to English home literacy, unless stated otherwise.

The HLE, parents’ activities, children’s outcomes, and lately, genetic predispositions, have received a lot of the research emphasis, but variations in the deeper underlying social and psychological factors that guide PHLBs are not yet fully understood (B. M. Phillips & Lonigan, 2009). Two important questions about early literacy education in general, and more specifically parents’ approaches to literacy in the home, have as yet, not been fully resolved. Uncertainty remains about *how* parents believe they should structure activities that will promote literacy acquisition and language

development within the HLE and *when* parents believe they should commence any activities that will promote children's language and literacy abilities (Snow, 2017, p. 5). Factors that are associated with parents' pedagogical approach and the effect of time on their approach are two of the questions this study will investigate.

There are potential differences in approaches of teachers and parents to literacy instruction, because teachers have more specialist knowledge with regards to literacy pedagogy (Early Childhood Australia, 1999). Despite the differences, two general perspectives compete, even though a balanced approach or differentiated instruction, which includes elements of both, have been recommended (Allington, 2005; Arrow, Greaney, & Chapman, 2015; Arrow & Tunmer, 2012; Tompkins, 2010). Van Kleeck (2004) explained the two main perspectives on how teachers and parents approach literacy instruction as follows:

The debate in reading hinges on what is most important to emphasize in beginning reading instruction: print form or print meaning. Print form consists of alphabetic knowledge (letter names, shapes, and sounds) and awareness of the sounds within words.

Phonological awareness is the more general awareness of the various sound components of spoken language, including syllables, sub-syllabic units called onsets and rimes, and individual sounds within syllables; phonemic awareness (PA) is the more specific term reserved for the latter (awareness of individual sounds within words). Children must have knowledge of both letters and PA to arrive at what is called the alphabetic principle: realizing that letters

(graphemes) in printed words correspond to sounds (phonemes) in spoken words (called sound-letter or phoneme-grapheme correspondences). An emphasis on print form in early reading pedagogy is variously called a skill-oriented approach, a code-oriented approach, or phonics. Approaches that emphasize the comprehension and composition of functional text are called meaning oriented approaches, which include the whole-language philosophy (p. 300).

The two approaches described above are commonly used, but the terminology varies considerably. Table 1 lists examples of some of the terms used to describe the two approaches to early literacy learning. The debate about which approach was more appropriate was described as the whole-language versus phonics debate (McBride et al., 2017) and “reading wars” (Arrow & Tunmer, 2012, p. 241). McBride et al. (2017) explained that the terms phonics and whole language are more frequently being used in the United States. However, they preferred to use “skill-focused versus comprehension-/communication-focused reading” (p. 374), because the phonics and whole language contrast was in their view inadequate for comparisons based on ethnicity, culture or immigration status.

In one of the first reported studies into PHLBs and specifically the relationship with emergent literacy, Fitzgerald et al. (1991) noted a general lack of research on parental perceptions of literacy acquisition, especially in the case of young readers, but they acknowledged limited research into the effects of socioeconomic status and culture. There are examples of large scale studies prior to this time that indeed investigated the

influences of ecological factors on children's literacy outcomes. For example, Sheldon and Carrillo (1952) reported on 12 factors such as size of the family, father's occupation and number of books in the home after surveying 521 parents. Father's occupation and the level of the parents' education were related to their child's reading ability. Sheldon and Cutts (1953) reported on 868 participants in a similar study. They evaluated parental characteristics and children's reading ability and identified "parental level of aspiration for the child" (p. 520) as very important. Moreover, these early studies did not include any statistical analysis and also did not focus on emergent literacy, but they alluded to the important potential for ecological family and parent factors to influence their children's literacy and language learning.

J. Anderson (1994, 1995a) investigated PHLBs and activities of parents with children of preschool age in Canada. He developed the *Parents' Perceptions of Literacy Learning Interview Schedule* (PPLLIS) as measure for these investigations. Parents were interviewed and asked 33 questions from the PPLLIS to evaluate their beliefs, as well as a question about the five activities that they deem the most important for their children's literacy development, in which they engage in with their children. Parents' responses to the 33 items were analysed to determine whether their approaches were congruent or incongruent with an emergent view of literacy acquisition. Appendix A contains the PPLLIS as used in this study and it includes additional questions. Further discussion of the measure follows in Chapter 3.

J. Anderson's (1994) sample was small (25 participants) and limited to middle and upper-middle-class parents, whilst later in a separate study, he reported findings on 30 participants from different cultural backgrounds (J. Anderson, 1995b). Lynch et al.

(2006) also reported on longitudinal data for a sample of 35 participants, collected by Anderson and his colleagues between 1999 and 2002. These small samples allowed use of the PPLLIS during in-depth interviews with the participants that provided rich data with explanations from parents why they selected certain responses.

J. Anderson contrasted emergent PHLBs with a traditional skill-based perspective in these studies. The emergent view is closely related to the terms in the right-hand column of Table 1, for example, whole language (Lynch et al., 2006; Tracey & Morrow, 2006). Morrow (2012) elaborated on the relationship between an emergent approach to literacy (related to whole language) and direct instruction (related to skills-based teaching): “the emergent literacy perspective exposes children to books early; it is a child-centered social constructivist approach with more emphasis on problem solving than on direct instruction of skills” (p. 16).

Parents whose beliefs are congruent with emergent literacy and who subscribe to the whole language model, will disagree with a statement such as *A child needs workbooks and basal readers (books with stories, pictures and questions) to learn how to read* [item 3 from the PPLLIS]. Conversely, parents who espouse a skills-based view will answer in the affirmative. J. Anderson (1995b) reported that different ethnic groups held different beliefs. Chinese-Canadian immigrant parents held views which Anderson characterised as traditional and skills-based. They preferred direct teaching as a method to promote literacy acquisition when they engaged their children in literacy related activities. Indo-Canadian immigrants and Euro-Canadian parents’ perspectives were in favour of an emergent literacy approach. Despite the small sample of 30 participants, Anderson concluded that there was much variation in

parents' beliefs within the groups, which indicated that beliefs for the groups were not exclusively emergent or skills-based, but mixed.

Table 1

*Examples of Terminology for Pedagogical Approaches to Teaching Literacy*

Terminology		Researchers
Bottom-Up	Top-Down	Teale & Sulzby 1986
Phonics	Whole Language	Adams 1990
Skill oriented	Naturalistic / Nurturing	Fitzgerald et al. 1991
Didactic	Child-centred	Stipek et al. 1992
Skill / Instructional	Naturalistic	Spiegel et al. 1993
Traditional	Holistic / Emergent	Anderson 1995
Skills	Entertainment	Sonnenschein et al. 1997
Inside-Out	Outside-In	Whitehurst & Lonigan 1998
Formal	Informal	Sénéchal & LeFevre 2002
Active	Passive	Burgess et al. 2002
Skills	Constructivist	Lynch et al. 2006
Conventional	Facilitative	Weigel et al. 2006
Sub-lexical	Lexical	Dias et al. 2009
Form based	Meaning based	Snow 2017
Skills focused	Content focused	McBride et al. 2017



PHLBs are associated with the activities they engage their children in to promote language and literacy skills. Whitehurst and Lonigan (1998) proposed a widely quoted model of reading in which they proposed “that emergent and conventional literacy consists of two interdependent sets of skills and processes: outside-in and inside out” (p. 854). They identified specific components of the two skill sets with outside-in skills consisting of the larger units of language such as words, semantics and context, whilst inside-out skill sets consist of the smaller building blocks such as sounds and letters (p. 855). For children to be able to read and comprehend what they have read, they need both skill sets. Another interpretation of this model would be that children need both decoding and language (vocabulary) skills (Van Kleeck & Schuele, 2010). When applying Whitehurst and Lonigan’s (1998) model to Sénéchal and LeFevre’s aforementioned HLM and Anderson’s dual belief system, it appears that informal home literacy activities promote outside-in skills and processes. Parents whose beliefs are congruent with an emergent literacy perspective, advance these skill sets and processes. Formal literacy activities by contrast facilitate inside-out skills and processes and this in turn aligns with beliefs that are traditional with a focus on skills. Whitehurst and Lonigan (1998) also noted the connections between emergent literacy and whole language. They equated the whole language approach with an emphasis on outside-in skills, but pointed out that both inside-out and outside-in skills are needed for reading. Arrow and Tunmer (2012) agreed with this outlook by unambiguously dismissing literacy instruction based exclusively on phonics or whole-language “as a one-size-fits all approach” (p. 247). Instead, they recommended a balanced approach based on “differentiated instruction” that depends on a child’s precursor skills or what

they called “cognitive entry skills such as alphabet knowledge, phonological awareness and vocabulary” (p. 247). This instructional approach is generally aimed as guidance for teachers to assess children upon school entry, but it also highlights the types of skills that children will benefit from if attained during the emergent literacy phase within the HLE. Research has shown that it is children from minority backgrounds and from families with low socio-economic status who often lack such entry skills (B. M. Phillips & Lonigan, 2009; Snow et al., 1998; Whitehurst & Lonigan, 1998).

It is necessary to remain cognisant of the fact that in the emergent literacy phase some parents have children who are too young to attend early childhood centres (kindergarten), but that others have children already in primary school. However, parents’ beliefs are not dependent on their children being of school going age—parents may have home literacy beliefs long before their children start attending school. An important source of information for parents of school-aged children is their teachers, who may often suggest how parents can help promote their children’s literacy development at home. Teachers therefore have the potential to directly or indirectly influence PHLBs.

Shopen and Liddicoat (as cited in Early Childhood Australia, 1999) reported that parents generally hold skills-based views when compared to those held by teachers. Similar differences were reported by Evans, Fox, Cremaso, and McKinnon (2004), but they used different terminology. They found that parents preferred a “bottom-up description of reading” (p. 130) which refers to the skills-based approach. However, teachers generally held a constructivist or emergent perspective. It has been relatively

recently that Hill and Nichols (2008) observed that,

the notion of ‘schooled’ pedagogies, which have traditionally been clearly observable, has often been placed in opposition to ‘home’ pedagogies, which are less visible. Further research into the construction of meaning in homes will expand understanding of less visible home pedagogies (p. 172).

Presently, little is known about PHLBs within the New Zealand context, especially parents with children who have not yet, or who have just recently reached the conventional literacy phase. New Zealand has two reputations in respect of literacy education. One is for general excellence in literacy achievement, but the other is less enviable, due to a significant gap that exists in the results of New Zealand’s top achievers and those of its struggling readers. McLachlan and Arrow (2011) identified those students who represent this “tail of reading failure” and underachievement as often being “children of Maori and Pacific Island origin and boys” (p. 126).

International assessment data such as the *Progress in International Reading Literacy Study* (PIRLS-2010/11) and the most recent data from the *Programme for International Student Assessment* (PISA 2015) show that within an international context, New Zealand children’s reading scores overall, are above average, but the gap between highest and lowest achievers remains a cause for concern (Chapman, 2016; Tunmer, Chapman, Greaney, Prochnow, & Arrow, 2013; Tunmer et al., 2008). These scores are not necessarily indicative of New Zealand HLEs, but Tunmer et al. (2013) have associated these outcomes with the national literacy strategy embedded within the national educational curricula. They assert that curriculum documents for

ECE and primary school teachers promote a whole language approach rather than a phonics approach. McLachlan and Arrow (2011) also weighed in on the issue by recommending that “potentially, a more coherent policy, a revised curriculum framework and a set of assessment resources for the Early Years would aid children’s transition to school and acquisition of literacy” (p. 132). These comments indicate that improving literacy outcomes would require a multifaceted approach that would start with the emergent literacy phase prior to school entry.

These views have been supported by others who have characterized the early childhood curriculum, *Te Whāriki* (Ministry of Education, 1996) as constructivist (McNaughton & Jesson, 2017), holistic (McLachlan & Arrow, 2014) and emergent (Zhang, 2015). Hamer and Adams (2003) saw the early childhood curriculum as firmly rooted in socio-cultural theory. Blaiklock (2010) has questioned the effectiveness of *Te Whāriki*. He expressed the opinion that it is unclear as to what children are learning in early childhood education (ECE) (Blaiklock, 2013). ECE teachers have been found to lack clarity in providing literacy instruction (McLachlan & Arrow, 2014). This may partly be due to what Zhang (2015) labelled *Te Whāriki*’s “de-emphasis on literacy” (p. 5). A consequence is that there is a lack of focus on precursor literacy skills, or what Whitehurst and Lonigan (1998) described as inside-out skills, because “whole language instruction involves an increased emphasis on the outside-in components of reading...” (p. 861). Such a situation may influence PHLBs to be more congruent with a holistic, emergent approach provide that teachers inform and influence parents. For parents with children in ECE, this would suggest a perspective in which they prefer to engage their children in play activities and picture

book reading, rather than instructional approached such as teaching them the names of letters or how to write their names.

However, there is a paucity of quantitative research on PHLBs in New Zealand that specifically pertains to the emergent literacy phase. Even the more encompassing domain of early childhood research lacks, for example, “longitudinal research, large samples and a focus on parenting variables” according to McLachlan (2010, p. 88). She also pointed out that published studies are often limited to theses, which leads to narrow approaches. Examples are a thesis study by K. L. Guo (2010) which was limited to eight Chinese immigrant families; a thesis study by Yang (2011) which was limited to the views of six Chinese immigrant parents. A qualitative study by Zhang (2015) did investigate the relations between emergent literacy and the beliefs and practices of 25 parents.

Children in New Zealand usually begin primary school when they turn five years of age (McNaughton, Phillips, & MacDonald, 2003). The New Zealand Curriculum of 2007, formulated by the Ministry of Education, National Standards of 2009 and several other documents for teachers published by the Ministry of Education, provide guidance for teachers in respect of literacy teaching in schools (Jackson, 2016; McNaughton & Jesson, 2017). Teachers are advised to incorporate decoding (phonics) and meaning (whole language) instruction; a balanced approach (McNaughton & Jesson, 2017). Tunmer et al. (2013) have argued against the adherence to the constructivist approach toward literacy teaching. They also criticized schools for not closing the knowledge gap that children have upon school entry. McNaughton and Jesson (2017) agreed that there has been an overreliance on a whole

language approach for reading words and for decoding in the past. They concluded though that it would be “overly simplistic and unhelpful” (p. 74) to view the New Zealand education system as having a whole-language approach to literacy instruction to the extent proposed by Tunmer and colleagues.

Thus, despite Ministry of Education recommendations to include phonics instruction, in essence it appears as if there is not yet sufficient focus on skills-based instruction to constitute a balanced approach. Teachers who underwent training during the height of the whole language era may still be influenced by that system despite professional development. If transmission of information about activities does take place, then parents may be influenced by this approach. Many New Zealand born parents with young children would also have attended local schools during an era when the whole language approach was preferred. The present study attempts to provide an empirical, quantitative exploration of PHLBs to extend our incomplete understanding and further develop our knowledge in this area of early literacy, specifically within the New Zealand context.

## **2.2.2 Independent Demographic Variables under Study**

### **2.2.2.1 Education**

Parents’ level of education has been well documented, either as a single predictor or in combination with income or occupation and thus viewed as socioeconomic status (SES). It has been used to predict parental involvement and various academic outcomes for children, including literacy outcomes (Davis-Kean, 2005; F. J. Morrison, Bachman, & Connor, 2005; Snow et al., 1998; Stipek et al., 1992; van Bergen, van Zuijen, Bishop, & de Jong, 2016). Rowe, Denmark, Harden, and

Stapleton (2016) specifically referred to the “consistent relationship” (p. 199) between parents’ level of education and their children’s early language and literacy skills that has been identified in previous research.

One of the first studies to report how parents’ literacy levels (levels of education) affect their perceptions of emergent literacy development was by Fitzgerald et al. (1991). Low literacy and high literacy parents in their study had different views with regards to various elements in the HLE such as resources and activities. Parents with lower levels of education viewed literacy as a “bundle of skills” whereas high-literacy parents viewed literacy as “cultural practice” (p. 209) without an emphasis on skills. Low-literacy parents did not see the need to act as role models for their preschoolers’ literacy development. Fitzgerald and her colleagues noted that parents with high levels of education preferred a naturalistic of literacy acquisition and they rejected the skills-based perspective. Of the 108 participants, low literacy parents were mostly racially black and high literacy parents were white and the authors also acknowledged that employing only white interviewers may have influenced responses in families of other ethnicities thereby creating bias. Lastly, the ethnic groups were not representative in the different educational categories that were used in the study.

As an example of the varying terminology, but with similar findings, (Stipek et al., 1992) used the terms “child-centred” versus “didactic teaching approaches” to describe PHLBs (p. 293). Didactic approaches were associated with formal teaching activities. In a large and diverse sample of 551 parents of 4– and 5-year old children, they reported that parents with low levels of education espoused a didactic, skills-based approach, which was geared towards academic outcomes. Parents with higher

levels of education were less likely to support a skills-based approach. They also confirmed a positive relationship or covariance between parents' beliefs and their literacy activities. The authors indicated that fathers indeed participated in the study, but it is unclear how many of the respondents were male. Their results only referred to the relationship between *mothers'* level of education and their beliefs (p. 304).

Not all the findings with regards to literacy have been as unequivocal. J. Anderson (1994) reported an overall emergent view held by 25 well-educated middle- and upper-middle class parents, but qualified his findings by stating that the parents were not emphatic about their emergent views. Participants in Anderson's study were interviewed, which allowed for a deeper and more nuanced understanding of their beliefs. It was also highlighted that the parents, as a homogeneous group, held varying beliefs. J. Anderson (1994) took care to point out that highly educated middle-class and upper middle class parents sometimes supported skills based views, but it depended on the question. This deviated from the findings reported by Fitzgerald et al. (1991) and Stipek et al. (1992). Anderson did caution against the simplistic use of parents' level of education to analyse their HLBs, but his conclusions are mostly based on analysis of individual questions.

Lynch et al. (2006) further analysed data collected in a longitudinal study by Anderson and his colleagues between 1999 and 2002 on the beliefs held by parents of young Canadian preschool children (p. 4). They found a statistically significant and large difference in parents' views in terms of their level of education. Responses were analysed according to parents *with* and those *without* "a post-secondary certificate or degree" (Lynch et al., 2006, p. 10). Statistical analysis showed a significant difference



in the beliefs of the two groups. Consistent with findings by Fitzgerald et al. (1991) and Stipek et al. (1992) mentioned above, parents *with* higher education favoured an emergent or holistic approach to literacy development. Parents *without* post-secondary qualifications preferred a traditional, skills-based approach. The two groups were small with 11 participants *without* higher education and 24 *with* post-secondary certificates or degrees. A majority of this sample (71 per cent) indicated that they speak English and an additional language.

A view that supported Anderson's (1994) finding was reported by Evans et al. (2004) who found considerable variation in PHLBs after studying a sample of 148 parents. They disagreed with findings that only parents with low levels of education have skills-based views. They reported that parents with higher levels of education also held a perspective that did not favour the constructivist approach.

From the above evidence it appears that more studies support the view that parents with lower levels of education favour a skills-based approach and those with higher levels of education prefer an emergent, holistic approach than studies that report parents with low education in favour of the emergent perspective. Thus, parents with lower levels of education will be more inclined to believe in instructional or teaching activities, such as using flashcards. Parents with higher levels of education generally do not favour direct teaching of literacy skills. They prefer informal activities that do not have a focus on the print per se, but for example, rather on reading storybooks for fun. However, variation in responses must be acknowledged, especially when parents' responses to various questions are considered in isolation.

#### **2.2.2.2 Household Income**

Income and education have been shown to be related to the HLE and children's literacy outcomes. As links between the HLE and outcomes became established, emphasis was placed in many countries, including New Zealand, to improve literacy outcomes for children from low income families who often underachieve academically. The significance of household income as a predictor of literacy outcomes was highlighted in a seminal report by Snow et al. (1998) in which they stated that "failure to learn to read adequately for continued school success is much more likely among poor children, among nonwhite children, and among nonnative speakers of English" (pp. 17-18). The present study did not investigate outcomes for children, but rather whether income is related to PHLBs. Various studies have shown a relationship between low income and traditional skill-based PHLBs, similar to education, but there are also scholars who question this connection and these will be discussed below. Again, similar to investigations into the relations between education and PHLBs, different terms were used to describe the two main perspectives of parents. In essence though, they had much in common with the traditional, skill based versus the holistic, emergent perspectives despite nuanced differences. Some of these results will be looked at to briefly compare the contexts, research methodologies and samples.

A deficit model has been used to account for the relationship between low SES and low literacy outcomes, which Rodríguez-Brown (2011) claimed is based on an assumption that low SES parents fail to provide a rich HLE for their children. This may be interpreted as parents not providing children with any experiences at all, or

experiences that are not viewed as acceptable mainstream experiences. However, several qualitative studies in the 1980s established that parents in low SES families do indeed engage their children in literacy activities or practices, but it was found that their use of print, for example, did not “fit” the way it was done in schools or mainstream homes (Heath, 1982; Taylor, 1983; Teale & Sulzby, 1986).

Schwanenflugel and Knapp (2015) posited that the potential effect of low SES may not only simply be a direct effect on reading development, but that it may indirectly affect families and communities. Children from low SES backgrounds, who struggle academically in comparison with their high SES counterparts, often fall further behind during vacations or may experience problems when they transition into school or between levels (Alexander & Entwisle, 1996; Alexander, Entwisle, & Dauber, 1996).

Parents from middle-income families engage in activities with their children that support an emergent orientation, whereas low-income families engage more in skills-related activities (L. Baker, Serpell, & Sonnenschein, 1995; Sonnenschein et al., 1997). They used “entertainment” (p. 111) as label for the emergent, whole language approach. Despite variations between low and middle-income families, similar to studies that use education as variable, Sonnenschein et al. (1997) identified “many commonalities among families” (p. 114). Purcell-Gates (1996) concurred in a study of 20 low-income families and described differences between “type and frequency of literacy events” (p. 407). She noted that the participants in the sample were not representative of low-SES families, but her findings aligned with J. Anderson’s (1995a) observation that large variation in HLEs exists, even within groups with the same language or culture.

In a large scale study by Silinskas, Leppänen, et al. (2010) it was reported that the lower mothers' (n = 189) and fathers' (n = 165) SES, the more they favoured a skills-based approach for reading and mathematics. The Finish participants responded to questions about how frequently they teach their children letter recognition and letter writing. These parents' home-teaching was dependent on their children's performance and they would adjust the amount of teaching according to their children's outcomes.

Whitehurst and Lonigan (1998) summarised the impact of household income:

Although one might quarrel with definitions and causes, there seems to be little doubt that there is a significant mismatch between what many children bring to their first school experience and what schools expect of them if they are to succeed. This problem, often called school readiness, is strongly linked to family income (p. 857).

As was stated above, Snow et al. (1998) identified struggling readers as often associated with low SES, language minority or specific ethnic groups. Within the New Zealand context, literacy outcomes indicate that these demographics are often, but certainly not exclusively, children from Māori and Pasific Island backgrounds (for example, Samoa and Tonga) and they are more often than not over-represented in low decile schools (McNaughton et al., 2003). Many outcome differences between white, English-speaking mainstream culture (people of European decent, also called Pākehā) and the minority Māori culture can be listed with Māori students persistently having low levels of achievement (Bishop, Berryman, Cavanagh, & Teddy, 2009; Brooker, Ellis, Parkhill, & Bates, 2010). Cullen (2008) summed up the situation in New Zealand with regards to the relationship between underperformance and outcomes as

one of significant variability, but the variability refers to differences in results for European/Pākehā and for Māori and Pasifika students, which she connected with socioeconomic status. This perception is largely based on PIRLS and PISA testing data for older students and little is known about primary education (Brooker et al., 2010).

Māori and Pasifika children enter school with different levels of precursor skills (McNaughton et al., 2003), which may suggest that these parents do not favour a skills-based approach to literacy learning. With specific focus on family literacy, Hohepa (1999) remarked that “differences in engagement with print across socioeconomic groups and cultural and ethnic communities in Aotearoa-New Zealand have been noted and furthermore that ‘Māori families’ are over-represented in low socioeconomic and underachieving groups” (p. 98). Hohepa also reported differences amongst Māori families. Nash (as cited in Hohepa, 1999) found that Māori families’ HLEs are not as print rich because they have fewer books and engage in different reading activities.

The reliability of income as a factor related to children’s reading development has been questioned, with Burgess (2002) making the observation that “SES is a marker variable, not a causal variable” (p. 714). Furthermore, the relationship between SES and reading outcomes in general is complex (B. M. Phillips & Lonigan, 2009; Snow et al., 1998). Correlation studies have only shown weak evidence for association between family SES and literacy outcomes (Goldenberg, 2003; Kirby & Hogan, 2008). Van Steensel (2006) remarked that many studies that investigated SES were qualitative and had small samples. However, most of these questions about SES were

concerned with literacy outcomes, not parent' beliefs.

However, B. M. Phillips and Lonigan (2009) conducted a quantitative study with 1044 participants in which they specifically looked at the relations between SES and the HLE. They confirmed that parents' home literacy activities were indeed significantly related to SES, including education and household income. They were cautious though and warned that the relationship between activities and SES is "less linear than is sometimes assumed" (p. 162). Moreover, an important consideration that they mentioned for comparisons made over time is that income levels change and this should be accounted for.

Holloway, Rambaud, Fuller, and Eggers-Piérrola (1995) reported that low-income mothers wanted their children's teachers to focus on teaching basic literacy skills rather than following a constructivist approach. It was notable that even with a small sample of only 14 parents, there was variation in parents' beliefs. The authors suggested that these PHLBs may have been due to the influence of the programmes followed in their children's early childhood centres, which were didactic in nature. This finding stands in contrast with the differences between parents' and teachers' views reported by Shopen and Liddicoat (2000).

In the same way that conflicting findings have been reported with regards to education, income has also resulted as a factor that must be carefully considered when predicting PHLBs. However, on the weight of the evidence it seems as if parents from poorer communities favour a more skills-based approach to their children's literacy learning, but that there are large variations in parents' beliefs.

### **2.2.2.3 Parent Gender**

Hannon (2003) stated that “This chapter has consistently referred to “parents” in programmes when generally, it would be more accurate to talk about ‘mothers’” (p. 106). Historically, this was not always the case. Van Kleeck and Schuele (2010) summarised changes that have taken place over time in gendered parental contributions to their children’s literacy development. They pointed to past eras during which, for example, Rousseau advocated for child-centred instruction and he suggested that only males should teach children and that “all education should take place in the home” (p. 343). With the prominence of emergent literacy came recognition of the involvement and contributions of family members, siblings, grandparents and carers in children’s literacy acquisition. The teacher-in-the-home role, especially in this emergent literacy phase prior to the start of formal education, has for much of the twentieth century been assigned to mothers (Van Kleeck & Schuele, 2010) and research data describing PHLBs and activities have consequently almost exclusively focused on mothers’ involvement (J. Anderson, 1994; Silinskas, Parrila, et al., 2010). Descriptions of mothers such as “the silent majority” (Reay, 1995, p. 337) and Chinese mothers as “tiger mother” (Fu & Markus, 2014; Kohler, Aldridge, Christensen, & Kilgo, 2012; Kohler, Kilgo, & Christensen, 2012; Lui & Rollock, 2013) recognize the central role of mothers in their children’s home learning. This maternal role has also been reflected in the low numbers of male participants reported in early years literacy research (Fitzgerald et al., 1991; Millard, 2003; B. M. Phillips & Lonigan, 2009; Weigel, Martin, & Bennett, 2006b), but more research about fathers’ general involvement in their children’s academic development in the

early years, has become available. Morgan, Nutbrown, and Hannon (2009) reported that out of 85 participants, the majority (77 per cent) were actively involved in literacy activities with their children, but the level of the involvement was unclear. The majority of fathers (65 per cent) read with their children. In respect of early years literacy related research, there have been limited publications for example on storybook choices (J. Anderson, Anderson, Shapiro, & Lynch, 2001) and book sharing frequency (C. E. Baker, 2014). The paucity of comparative studies that include parents of both gender, makes it important to investigate whether gender is associated with different sets of beliefs and consequently different approaches to activities.

Gendered views about literacy may, to an extent, be attributed to influences external to the family (Nichols, 2014). In a study of 25 mothers and eight fathers in Australia, Nichols compared parents' gendered views of learning and development. She found that mothers rely on a very wide network to gather information, for example, other family members and female friends. Fathers on the other hand did not get the same amount of information from family or friends; instead, they received information from teachers and also independently searched for information. It was mentioned above, that teachers generally have views that are more constructivist and emergent than parents, which would suggest that fathers may have a more holistic perspective compared to mothers. In reporting on a different study, Nichols (2002) found that both mothers and fathers (31 mothers and 25 fathers) read stories to their children but that differences exist in their approach. Fathers were more inclined to read to their children during bedtime, but they would also employ strategies to shorten the duration



of such reading. In an analysis of fathers' approaches to book reading, Swain, Cara, and Mallows (2017) found that fathers did not promote their children's vocabulary and neither did they use general literacy teaching strategies such as questioning or asking their children to make predictions or inferences. They also noted that fathers viewed family owned books to be read to their children as a fun and pleasurable activity.

As an example of the aforementioned variability within groups, DeBaryshe, Binder, and Buell (2000) identified three distinct groups with different perspectives on literacy instruction in a small study of 19 mothers. They reported a group in favour of whole language, a group in favour of skills-based phonics instruction and a group consisting of some mothers with "varied and idiosyncratic beliefs" (p. 119). Weigel et al. (2006b) similarly distinguished between mothers' literacy beliefs, but they used the terms "facilitative and conventional" (p. 191) to describe mothers' views. Facilitative mothers assumed an active teaching role, but conventional mothers viewed teachers as responsible for teaching children. Despite the focus of these studies on only mothers' home literacy beliefs, it confirms that even within homogenous groups, there may be contrasting approaches.

Aram (2010) compared mothers' and fathers' approaches to writing instruction in the homes of 51 families. With regards to writing, the author stated that parents support children's writing development by using skills-based approaches. A requirement for parents would be a level of familiarity with teaching strategies. Aram (2010) had a different view from that of Nichols, mentioned above, about sources of mothers' knowledge. Aram proposed that mothers gain insight into writing development by

witnessing activities in their children's preschools and kindergartens. She was also of the view that mothers were more involved with their preschools and interacted more regularly with their children's teachers than fathers do. Mothers have more skills-based views than fathers and refer more to "the decoding process... [and] special features of the orthography" (Aram, 2010, p. 15). It is not clear whether Aram's conclusion reached in respect of writing, also applies to reading.

Parents' gendered views about their children's literacy development may be influenced by their children's literacy achievements (Ozturk, Hill, & Yates, 2016), but it is not clear from the research whether *parents' gender* is associated with PHLBs. Despite this uncertainty due to a lack of quantitative research and comparisons in the PHLBs of both mothers and fathers, home literacy is seen as gendered and sociocultural practice (Morgan et al., 2009; Orellana, 1995; Ortiz, 2004; Ozturk et al., 2016; Swain et al., 2017). Thus, the question is posed whether parents' gender is related to different approaches to their children's literacy development.

#### **2.2.2.4 Parent Age**

Parent age has rarely been used as a variable related to PHLBs. In the present study, there are two motivations for including parent age as a possible predictor of PHLBs. C. E. Baker (2014) used mothers' and fathers' age as demographic variables to predict their children's literacy outcomes. Despite it being a large sample ( $N = 750$ ) of African American families, the predictive capacity of these two variables were not statistically significant. Baker (as cited in Duncan & Brooks-Gunn, 2000) proposed that parents who are older provide HLEs that lead to better outcomes for their children. Thus, parent age may be associated with a specific approach or it may

suggest a mixed approach, which includes skills and entertainment elements in the same way that a balanced approach to literacy has been advocated (Arrow & Tunmer, 2012; Morrow, 2012; Van Kleeck & Schuele, 2010).

The second motivation in support of the argument to include this variable is that parents' school experiences provide a basis for their home literacy beliefs (Curenton & Justice, 2008; Sonnenschein et al., 1997). The whole language method was the predominant approach to literacy instruction in English speaking nations, including New Zealand, during the 1970s into the 1990s (Anderson 1995; Makin, Jones Díaz & McLachlan, 2007). Publication of the National Reading Panel's report in 2000 can be taken as a watershed moment for advocating phonics or a balanced approach to literacy instruction (Pearson & Cervetti, 2017). Literacy practices during the era that the participants attended school, and thus indirectly their age, may therefore be relevant in the assessment of their home literacy approach with their own children.

#### **2.2.2.5 Immigration Status**

Increased mobility, which has contributed to diverse populations in many countries, has resulted in a large number of studies, especially in predominantly English-speaking countries such as the USA and UK, Canada and Australia (McBride-Chang, 2004; Okagaki & Bingham, 2010; Seymour, 2005). The aim has been to investigate, inter alia, how immigrants view education, changing trends in parental involvement and to a lesser extent, approaches to literacy. Immigrants generally have different views from the mainstream populations in Western countries in terms of various aspects of their children's education, including literacy acquisition (J. Anderson, 1995b; Chiu & McBride-Chang, 2010; Leseman & de Jong, 1998; Li & Wang, 2013;

Ran, 2001). Immigrants often bring different languages and different cultures to their host country, which have been shown to affect their home literacy beliefs and within the context of American schools, parents lack familiarity with the school culture (Paratore et al., 1995). Some cultures place the responsibility for teaching their child how to read and write entirely on the teacher (Gunderson & Anderson, 2003; Paratore et al., 1995). These parents often do not value book reading in the same way that mainstream Western, white middle-class families do and may be of the view that they should rather develop their child's moral and social behaviours (J. Anderson, Anderson, Friedrich, & Kim, 2010; Janes & Kermani, 2001; Okagaki & Bingham, 2010). Another potential problem is that even parents from cultures who do value direct involvement, may lack social or "cultural capital" (Bourdieu & Passeron, 1990, p. 30), "funds of knowledge" (Moll, Amanti, Neff, & Gonzalez, 1992, p. 132) or "literate cultural capital" (Tunmer & Nicholson, 2011, p. 420). These terms are used to describe the insights, awareness and knowledge about, for example, socio-cultural practices in the local school or educational system. In the context of the present study, it is possible that immigrants with non-English speaking backgrounds may lack these New Zealand mainstream skills or knowledge and their PHLBs may be different from those held by New Zealand parents.

There is, for example, evidence that immigrants from India and China have views that are different from the mainstream views of "Euro-Canadian" parents about literacy acquisition (J. Anderson, 1995b, p. 396). The literacy beliefs of three cultural groups with ten participants in each group were compared and the majority of Chinese-Canadian parents aligned with a traditional perspective favouring direct teaching of

skills. These parents supported the view that basal readers and workbooks are necessary for their children to develop early literacy skills. A smaller number of the Indian-Canadian and Euro-Canadian parents also valued direct instruction. Differences in views could not be attributed to SES, because the Chinese and Euro-Canadian groups were both middle- or upper-middle class parents. Immigrant parents therefore held different perspectives. This study was another example of significant variation in the participants' beliefs about language and literacy acquisition. Anderson's sample was small though and he cautioned against generalisation. Another Canadian study that supported Anderson's findings was conducted by Li (2006), who reported discontinuity between Chinese immigrants' approaches to home literacy and that experienced in their children's schools. Chinese parents preferred a skills-based approach with regards to English literacy development at home. They viewed schools as an environment where play-based activities were promoted. Parmar, Harkness, and Super (2004) reported a similar perspective when they compared 24 Asian and 24 Euro-American parents. Asian participants favoured direct instruction whilst Euro-American parents valued play. The former also believed that their children should start learning at a younger age than their counterparts. Van Steensel (2006) compared 48 local, Dutch speaking families with 68 ethnic minority families and looked at parents' fit with different HLE profiles. He looked at Dutch literacy acquisition and a majority of the Dutch families fit a rich HLE profile. This is another example of significant variation between and within groups. However, one advantage of the study is that it provides a quantitative comparison of native born and immigrant parents' beliefs by analysing the HLE. Ethnic minority children

experienced home literacy activities that mirrored those from their schools. Another advantage is that the study also recognises that acculturation of immigrant families is a process that takes time with many families at first being unfamiliar with the teaching practices of their children's teachers. In a study on German literacy acquisition, Niklas and Schneider (2013) reported that German speaking parents were less inclined to use a skills-based approach. They observed that "formal teaching by parents seems to be an important aspect of HLE in English speaking countries...it occurs less often in German families" (p. 42). These two studies investigated languages other than English and it is possible that language may be associated with PHLBs. Main home language was therefore included as a separate independent variable.

Within New Zealand, approximately a quarter of the population is foreign born (Statistics New Zealand, 2014). According to Butcher (2004), New Zealand immigration has changed over the years. He summarised that at first, mainly British and Irish citizens contributed to a homogenous flow of immigrants. However, during the 1960s and 1970s, numbers of Pacific peoples arrived and during the 1990s, many Asian immigrants arrived. Continued diversification and underachievement of ethnic groups have prompted research into how parents of young children may be better supported with language and literacy in the home. Jackson (2016) noted that teachers' pedagogical approaches to literacy may differ from PHLBs and literacy practices. She agreed with J. Anderson et al. (2010) who argued that deficit views of home literacy are evident because teachers still do not recognise or value cultural differences or variations in home literacy practices.

Two recent countries of origin of New Zealand immigrants where English is not the main language, are China and India (Statistics New Zealand, 2014). Winsler et al. (2014) pointed out that children from Asian immigrant families often have better academic outcomes in the USA, when compared to, for example, children in families that have emigrated from Mexico. They attributed this in part to differences in family SES and speculated that it may also be the result of different “teaching practices in the home” (p. 751). Little is known about New Zealand immigrants’ HLEs, but a few qualitative studies have investigated Chinese immigrants’ perspectives on early childhood (K. Guo, 2012; Yang, 2011) and primary school education (Liao, 2007). Yang (2011) interviewed six Chinese immigrant families and found that all the parents agreed that a HLE that is supportive facilitates children’s acquisition of English literacy skills. The participants in her study supported the emergent literacy perspective. Such views are aligned with *Te Whāriki*. A different finding was reported by K. Guo (2012) who claimed a “disconnect between activities at home and at childcare” (p. 5). She interviewed 10 Chinese immigrants of between 31 and 43 years of age with levels of tertiary education. Their views were reported as being supportive of the childhood centre’s culture, but that learning in the home was regarded separate and steeped in the Confucian tradition. Liao (2007) agreed that Chinese immigrants still followed the Confucian tradition, but similar to Yang, she reported that “the current study surprisingly discovered that a great number of Chinese immigrant parents express an appreciation to New Zealand’s play, child-centred, loving and gentle teaching approach at primary schools” (p. 149). This conclusion is important, because the sample of 75 was significantly bigger than the previously mentioned two

studies. However, she also reported somewhat contradictorily, that some Chinese parents still prefer formal learning rather than play-based activities. Many immigrants hail from countries where English is the/an official language, but lately, many immigrants in New Zealand also speak a main home language other than English.

#### **2.2.2.6 Home Language**

According to Statistics New Zealand (2014), the six most common languages spoken in New Zealand in 2013, were English (96.1 percent of people who stated at least one language), te reo Māori (3.7 percent), Samoan (2.2 percent), Hindi (1.7 percent) Northern Chinese (including Mandarin) (1.3 percent) and French (1.2 percent)” (p. 23). The present study looked at parents’ home literacy beliefs with regards to their children’s English literacy acquisition.

Of learning to read and write in English, Snow et al. (1998) reported that “although every writing system has its own complexities, English presents a relatively large challenge, even among alphabetic languages” (p. 21). They identified language minority students as one of the groups at risk. “Dual-language learners” is a term that has been used recently to describe children who are learning a language that is different from their home language (Galloway & Lesaux, 2017, p. 26), but the term English language learners (ELLs) (August, Shanahan, & Escamilla, 2009, p. 432) will be used here because of the focus on English in this study. Not all ELLs struggle with English literacy, but Winsler et al. (2014) attributed differences in outcomes for children from immigrant and non-immigrant families the home language or languages. Coulmas (as cited in Bialystok, Luk, & Kwan, 2005) explained that languages use different writing systems, which in turn may affect children’s literacy



acquisition. Chen-Bumgardner (n.d.) was more specific in pinpointing that Chinese children, who are learning English, commonly struggle with decoding and spelling when compared with native English-speaking children. She also proposed that this may be related to limited phonological, phonemic and morphological awareness. It therefore is necessary to briefly look at writing systems used for writing in different languages.

Several writing systems have been identified (Coulmas, 2003; Sampson, 1985), but two stand out because they employ contrasting methods. Various scholars distinguish between two main writing systems based on meaning and sound (Coulmas, 2003; Perfetti & Dunlap, 2008; Treiman & Kessler, 2007). The logographic writing system is the most common example of a meaning-based writing system, whilst the alphabetic writing system is based on sound. Cook (2008) defined these two writing systems as follows:

- meaning-based writing system: a form of writing in which the written sign (character) connects directly to the meaning, as in Chinese characters
- sound-based writing system: a form of writing in which the written sign connects to the spoken form, whether through syllables (Japanese, Korean) or consonant phonemes alone (Arabic, Hebrew), or both vowels and consonants (alphabetic languages like Greek, Urdu or English) (p. 87).

When children learn to read in English (or alphabetic writing), they learn how the alphabetic writing system encodes English (Perfetti & Zhang, 1995). An important aspect of this process involves acquiring knowledge about how to map the letters of the alphabet to the spoken language or how graphemes (letters) map to phonemes

(sounds) (Perfetti & Dunlap, 2008). Wang, Yang, and Cheng (2009) listed differences between Chinese and English. They explained that the logographic system used to write Chinese orthography is different from alphabetic languages because the characters used in the logographic writing system do not map onto phonemes. They map onto morphemes and syllables, which makes the logographic writing system morpho-syllabic. When Chinese words are sounded out, four different tones or “pitch contours” are involved to determine meaning (Perfetti & Dunlap, 2008, p. 20). These characteristics of the logographic writing system are related to learning to read.

There are different ways to teach English, but Perfetti and Dunlap (2008) emphasised that children should learn the alphabetic principle. McBride et al. (2017) identified this as one of “the building blocks of reading” (p. 374). F. J. Morrison et al. (2005) agreed with this principle by suggesting that parents include skills development activities such as pointing out and naming letters during storybook reading and modelling of words can be sounded out. They questioned whether storybook reading on its own and for the single purpose of entertainment can contribute to the development of children’s decoding skills. L. M. Phillips, Norris, and Anderson (2008) similarly concluded that shared book-reading may not always promote children’s early literacy development in all instances — it may have benefits such as parent-child bonding and creating interest in literacy that do not fit the skills-entertainment paradigm.

When children learn to read in Chinese, there is no alphabetic principle involved because the mapping principle (Perfetti & Zhang, 1995) works differently. Instead, children learn to identify each character as a whole and according to McBride-Chang

(2004), the most common method is to employ rote learning or memorisation techniques, even though phonology is used in Chinese reading, but to a lesser extent. Children learn to identify new characters by repeatedly copying the character (McBride-Chang, 2004; Perfetti & Dunlap, 2008). Learning to read and write in Chinese is much more complex than the simplistic view presented here, but with the focus in the present study being on English this provides insight into Chinese PHLBs. Rote memorisation strategies to learn Chinese characters is analogous to the whole language approach used to learn English literacy skills.

A separate issue that affects parents who speak different languages that use the alphabetic writing system, is the orthographic depth hypothesis (ODH) proposed by Frost, Katz, and Bentin (1987). According to Katz and Frost (1992), alphabetic languages vary in their complexity of the mapping principle. Shallow orthographies have a simple mapping system in which graphemes correspond one-to-one with phonemes. Deep or opaque orthographies follow a much more complex mapping principle and English is an example of an opaque language (Seymour, 2005). Ziegler et al. (2010) described English as an “outlier” language in respect of orthographic depth (p. 551).

A small selection of European alphabetic languages is categorised in Table 2 to show their comparative orthographic depth. The potential implication of orthographic depth for the present study is that parents who speak languages that are classified as shallow, do not teach their children to read or write before school entry, because their children find it relatively easy to learn the alphabetic principle within a short period of time in school (Leseman & de Jong, 1998; Manolitsis et al., 2013).

Families who speak different languages will therefore have different beliefs with regards to literacy and ways of using literacy in their homes, which ties in with the socio-cultural theory explained earlier. However, even families who speak the same language, for example, English, have varied beliefs and practices (Heath, 1982). In the present study, it was decided to use the main home language of the participant, rather than writing system, in order to be able to distinguish between the PHLBs of native born and immigrant English-speaking participants.

Table 2  
*Relative Orthographic Depth of a Selection of European Languages*  
*(Adapted from Seymour, Aro, & Erskine, 2003, p. 146). Reprinted with permission*

Orthographic Depth					
Shallow			Opaque		
Simple	Finnish	Greek Italian Spanish	Portuguese	French	
Complex		German Norwegian	Dutch Swedish	Danish	English

#### 2.2.2.7 Months Helping the Child

The number of months or timeframe that parents have been helping their child to develop literacy skills is related to their child's age, but parents will start to engage in activities at different ages. PHLBs and the social nature of the HLE must be considered as dynamic (McNaughton, 1995). Beliefs may change over time due to the influence of a child's progress or perceived lack of progress (B. M. Phillips &

Lonigan, 2009). Perceived or actual lack of progress may lead to increased levels of involvement and changing beliefs. In such instances parents' focus may shift to development of specific skills, but when children do display more advanced skills, then parents may also adjust their beliefs and activities under a "bidirectional influence" according to B. M. Phillips and Lonigan (2009, p. 150). This application of Bronfenbrenner's chronosystem may become evident in changes in parents' beliefs when their child transitions to school (Smith, 2013).

Arrow and Tunmer (2012) discussed the importance of "cognitive entry skills" (p. 242) such as alphabet knowledge, oral language skills and phonological awareness. These "preacademic skills" (B. M. Phillips & Lonigan, 2009, p. 150) are acquired prior to school entry and in New Zealand there is very wide variability in children's cognitive entry skills (McNaughton & Jesson, 2017). PHLBs may change when their child transitions into primary school because parents realise their children lack these entry skills.

Little is known though about the relationship between the timeframes that parents have been helping their children and specifically their PHLBs.

#### **2.2.2.8 Child Gender**

Studies, comments and opinions regarding the influence of gender on differences in children's learning and outcomes go back quite far in time. For example, Van Kleeck and Schuele (2010) reported historical gender differences in Roman writings in which only boys were taught how to read and write. A significant amount of research that investigates gender differences in literacy has been published (Lynn & Mikk, 2009). A "gender gap" (Maynard, 2002, p. 14) or "reading gap" (Sullivan, 2009, p. 14)

attributed to gender exists, especially as it relates to literacy outcomes. A statistically significant difference in PIRLS 2011 average reading outcomes between boys and girls in grade 4 has been highlighted by Mullis, Martin, Foy, and Drucker (2012, p. 52), with girls in various countries, including New Zealand, consistently achieving better reading outcomes than boys. Chatterji (2006) qualified these differences though. She reported that for younger children in kindergarten, SES showed a stronger effect than gender. Another noticeable gender difference towards literacy is in children's attitudes with girls more positive and interested in reading than boys (Logan & Johnston, 2009, 2010).

A "gendered view about literacy (GVL)" (Ozturk et al., 2016, p. 703) is described from a social constructivist viewpoint and develops via social practices (J. Anderson, 1995b; Millard, 2003; Orellana, 1995; Ozturk et al., 2016). However, F. J. Morrison et al. (2005) recommended that the effect of gender should be looked at "through more proximal sources of influence, like parenting" because independently, it acts as a "distal factor" (p. 93). Logan and Johnston (2009; 2010) also preferred to look at the effects of gender in relation to other factors rather than in isolation. Differences have also been found between cultures, which is at a macro level, but still important. Gender is regularly evaluated from a Western and white, middle-class perspective (Millard, 2003; Orellana, 1995). Li (2011) observed that different cultures view gender differently and that this may contribute to the development of children's literacy development.

Thus, it would appear that gender differences in literacy outcomes may be ascribed to differences in ability, but it may equally be influenced by differences within the HLE

and more specifically PHLBs. The fact that it has been identified as a weak predictor means that there is very little research available that looks into how a child's gender is associated with PHLBs.

Wilhelm and Smith (2014) proposed that appropriate strategies might prevent underachievement by boys and they recommended "inquiry-oriented approaches" that include an important element, "the power of pleasure" (p. 273) which they deem more suitable for boys. Their work was done with adolescent boys, but the question arises whether parents of young children follow a similar approach in which PHLBs favour an entertainment approach with boys and a more skills-based approach with girls, or whether gender makes no difference in the way that parents decide on literacy activities for their children. Parents' selection of books, activities and reading strategies may be related and J. Anderson, Anderson, Lynch, and Shapiro (2004) conducted a study into gender differences in book selection and reading. They pointed out that child gender and age are mostly used as control variables rather than independent variables and thus the main topic of investigation. Their sample included 25 dyads that consisted of mothers and fathers, as well as boys and girls. They found that the children's gender was only marginally related to book reading with little attention paid to the text, but in the case of boys there was no attention paid to the print when narrative stories were read. This would suggest that parents do not follow a skills-based approach with boys, but the evidence for such a conclusion is extremely limited. Shared book reading is often suggested as an activity to promote children's literacy, but, irrespective of their child's gender, parents may not always focus on the print (J. Anderson et al., 2010; Evans & Shaw, 2008).

### **2.2.2.9 Child Age**

A historical debate about when children should start receiving reading instruction is as yet unresolved (Van Kleeck & Schuele, 2010). Alexander and Entwisle (1996) promoted a view that parents should start as early as possible to develop their children's academic skills. Research by Suggate, Schaughency, and Reese (2011) and a meta-analysis of several empirical studies (Suggate, 2010) have led him to dispute the perceived long term benefits of starting to teach children prior to formal schooling. However, this debate about when to start teaching children literacy skills is only indirectly related to PHLBs.

It was stated above that emergent literacy develops on a continuum that starts at birth (Teale & Sulzby, 1986). There is virtually no evidence to explain the relationships between toddlers' emergent literacy skills and PHLBs (C. M. Edwards, 2014). However, B. M. Phillips and Lonigan (2009) noted that children as young as two and three years of age show variation in skills. They proposed that a child's skill development and literacy outcomes may determine PHLBs. Parents whose children struggle with aspects of literacy in school, may be more determined to help by promoting skills. Purcell-Gates (1996) similarly remarked that,

these parents, regardless of literacy level and home literacy event frequency, found the onset of formal literacy instruction as the appropriate time to begin or to increase their involvement in their children's literacy learning. At this time, parents began explicit teaching of letters and words. They also began reading to their children (p. 426).

Children in New Zealand start primary school when they turn five, but in other



countries it varies from six to seven (McLachlan et al., 2012). Parents of children under the age of five may focus on storybook reading as entertainment or they may teach early skills such as the names of the letters of the alphabet or even model how their child should write his or her name.

The Education Update Act 2017 provides for lowering of this entry age to allow children younger than five cohort entry into primary schools (MOE, 2017). Elkind (2001) posited that, “parents [are] anxious to give their children an edge in what they regard as an increasingly competitive and global economy”. Thus parents may be influenced by the MOE decision, to believe that “younger is better.” (Suggate et al., 2011) questioned the need for literacy instruction at very young ages in an ongoing debate about the effect of age on literacy acquisition. Such policy decisions may promote the existing inclination of NZ-born parents to employ a traditional, skills-based approach to develop concrete skills to the detriment of reading to their children for fun. Parents might change their existing views and instead start at younger ages to get their children “ready for school”.

### **2.3 Summary**

The theoretical framework for this study is provided by various social learning perspectives on emergent literacy acquisition. Relations between ecological factors and PHLBs are investigated as well as the predictive capacity of these factors. The significant variations or differences were then further explored.

Parents may engage their children within the HLE to promote their English skills and display perspectives that can be characterised as skills-based, emergent or a mix with elements of both approaches. Skills-based beliefs are associated with parents

engaging in teaching activities in which they may use basal readers and workbooks.

Emergent beliefs will have parents focus on entertainment and fun mainly during shared book reading activities.

PHLBs must be evaluated within the larger social context and relationships with demographic factors may aid to extend our knowledge of PHLBs. It would be a mistake to look at PHLBs in isolation, especially when B. M. Phillips and Lonigan (2009) point to bidirectional influences affecting PHLBs and when the HLE is dynamic (McNaughton, 1995, 2001).

## CHAPTER 3

### METHODOLOGY

This study was designed to investigate the home literacy beliefs of parents with young children in New Zealand. In this chapter, the introductory section explains the nature of the variables. The research design and research questions are discussed along with the data analysis plan. The measure for PHLBs is then presented. The participants and sampling are described. Procedures followed before, during and after the study are described and a summary concludes this chapter.

#### 3.1 Variables

The variables under study are grouped and operationalised below in two categories—nine independent predictor variables and one dependent variable. The independent demographic variables were included as separate items in the questionnaire.

##### **Independent Predictor Variables**

*Education* was the participating parent's completed level of education, measured as (1) elementary/primary school, (2) high school, (3) college, (4) university degree and (5) post-graduate degree. For the regression analysis, the two categories were (1) school level education, which combined primary and high school education into one category and (2) tertiary education, which was a combination of the remaining higher levels of education.

*Income* used the following categories of annual household income: \$0, \$1 - \$24,999, \$25,000 - \$49,999, \$50,000 - \$74,999, \$75,000 - \$99,999, \$100,000 - \$124,999, \$125,000 - \$149,999, \$150,000 - \$174,999, \$175,000 - \$199,999, \$200,000 -

\$224,999, \$225,000 - \$249,999, \$250,000 - \$274,999, \$275,000 - \$299,999, \$300,000 or more. For the regression analysis, the New Zealand median weekly income from wages and salaries of \$882 (Statistics New Zealand, 2015) for 2015 was multiplied by 52 weeks to get annual income of \$45,864 which falls in the \$25,000 - \$49,999 category. The next higher income band (\$50,000) was chosen as the lower end of the second income category. (1) \$0 - \$49,999. Income above this level was used for category (2) \$50,000 and more.

*Parent gender* was categorised as male and female.

*Parent age* was calculated in years from the difference between the parent's year of birth and the year in which they completed the questionnaire.

*Immigration status* was determined by whether the participating parent was born in New Zealand or immigrated to New Zealand.

*Home language* was the main home language used most of the time by the participating parent. It was possible that other languages were spoken in the household and that the participant spoke other languages too.

*Months helping child* was an estimate by the participant of how many months in total they have been helping the child to promote English literacy.

*Child gender* was categorised as male and female.

*Child age* was calculated as the difference in months between the child's date of birth and the questionnaire completion date.

### **Dependent Outcome Variable**

*Parents' home literacy beliefs (PHLBs)* with regards to their children's acquisition of English reading and writing skills measured the participating parent's beliefs on a

continuum. Likert scale options for 33 items included in the survey were (1) strongly agree, (2) agree, (3) somewhat agree, (4) somewhat disagree, (5) disagree and (6) strongly disagree.

### **3.2 Research Design and Data Analysis Plan**

A quantitative approach informed the self-report survey data collection method for this study (Creswell, 2012; Field, 2009). Qualtrics survey software provided by the University of Canterbury was used to set up an online questionnaire, which was then used to collect the participants' demographic data, to survey parents' home literacy beliefs, literacy resources in the home, frequency of shared book reading activities and an open ended question to record parents' home literacy activities. The SPSS software package was used to conduct statistical analyses of the data with the aim of the study to answer four research questions.

*Research Question 1: Are the demographic factors education, income, parent gender and age, immigration status, home language, months helping child, child gender and age associated with parents' home-literacy beliefs?*

The demographic factors were nine independent variables with some categorical and others continuous. Spearman and biserial correlation coefficients were used to explore the relationships between these variables and PHLBs. No assumptions were made about the direction nor magnitude of potential associations between the predictor variables and the dependent variable.

*Research Question 2: To what extent do education, income, parent gender and age, immigration status, home language, months helping the child, child gender and age predict parents' home literacy beliefs?*

A hierarchical multiple regression analysis was conducted to determine the predictive capacity of the independent variables. Continuous variables were changed to categorical variables in order to meet the assumptions for regression analysis.

*Research Question 3:* Do groups present different home literacy beliefs in terms of the significant predictors?

*Hypothesis 1:* Parents' home literacy beliefs are the same, irrespective of the parents' main home language.

*Hypothesis 2:* Parents' home literacy beliefs are the same, irrespective of the parents' immigration status.

*Hypothesis 3:* Immigrant and New Zealand-born parents' home literacy beliefs are the same, irrespective of the *number of months parents have been helping* their children, when controlling for their child's age.

*Hypothesis 4:* Immigrant and New Zealand-born parents' home literacy beliefs are the same, irrespective of their *level of education*.

*Hypothesis 5:* Immigrant and New Zealand-born parents' home literacy beliefs are the same, irrespective of their *child's age*.

Five statistically significant predictors revealed by the regression analysis were used to explore group differences. Independent samples *t*-tests, between-groups analysis of variance (ANOVA) and analysis of covariance (ANCOVA) procedures were used to answer the hypotheses that contrasted the home literacy beliefs of parents who speak English as their main home language and parents with other main home languages, New Zealand-born and immigrant parents and the other significant variables.

*Research Question 4:* Are the differences between immigrant and New Zealand-born

*parents' home literacy beliefs also evident when their perspectives are compared on sub-items of the questionnaire?*

A factor analysis was conducted to identify the strongest factors revealed by PHLBs. Two factors were identified and follow-up ANOVAs were performed to determine whether immigrants and NZ-born PHLBs were consistently different in terms of these two factors as revealed by the result of hypothesis 2.

Additional analyses were also performed to further investigate results yielded by the data from the above analyses. First, the significance of a participant's main home language as a predictor of PHLBs and the statistically significant difference in the beliefs of parents who speak English L1 and Other L1 prompted further investigation of the differences between three language groups, to include parents who speak Chinese as their main home language. A comparison was also made between the PHLBs of English L1 immigrants and NZ-born parents. Finally, differences in the means of immigrant and NZ-born parents on the two factors that were identified prompted a comparison of PHLBs on the individual items included in each factor.

### **3.3 Measure**

Data on the independent variables were collected via the demographic section of the online questionnaire. The dependent variable, parents' home literacy beliefs, was measured by using 33 items from the *Parents' Perceptions of Literacy Learning Interview Schedule* (PPLLIS) (J. Anderson, 1994, 1995a). Appendix A includes the items included in the questionnaire.

#### **3.3.1 Statement of Purpose**

The PPLLIS was used to measure the congruence or incongruence of the participants'

beliefs with a holistic, emergent perspective in respect of their children's acquisition of English literacy skills.

### **3.3.2 Development of the Measure**

The PPLLIS was developed by J. Anderson (1995a) and used in Canada. Other research studies that have used this measure have been reported by Lynch et al. (2006) and Duren (2006). J. Anderson (1995a) described the development of the instrument as follows:

This instrument, somewhat similar to Deford's Theoretical Orientation Profile, is a 33-item interview guide developed by the author. A review of the literature revealed a number of salient features of emergent literacy (e.g., children use inventive spelling as they begin to write) which were then reformulated into questions (e.g. "should you correct your child if she wrote kt for the word cat?") and grouped thematically into reading, writing and literacy-general. Two university professors whose expertise is in early literacy reviewed the instrument to establish face validity and content validity. The instrument was then administered to a class of 40 senior undergraduate primary education students who had studied emergent literacy in-depth in language arts/reading methods courses. Half the students were instructed to answer as if they believed in a traditional readiness orientation while the others were asked to answer as if they subscribed to an emergent literacy view. The answers were then



coded as to anticipated responses and a reliability of 95 percent was established (pp. 211-212).

### **3.3.3 Scales and Subscales**

In the original PPLLIS, the interviewer recorded yes-no answers to the questions. However, Lynch et al. (2006) who also used the PPLLIS amended the scoring procedure of the 33 items to a 5-point Likert scale. These scores ranged from (1) strongly agree to (5) strongly disagree. Higher scores denoted an emergent perspective on literacy, whilst lower scores denoted a traditional or skills-based perspective. In the current study it was anticipated that a number of Asian families would participate. The 5-point scale used by Lynch and her colleagues was therefore changed to a 6-point Likert scale as recommended by (L. Cohen, Manion, & Morrison, 2007):

There is a tendency for participants to opt for the mid-point of a 5-point or 7-point scale (the central tendency). This is notably an issue in East Asian respondents, where the ‘doctrine of the mean’ is advocated in Confucian culture. One option to overcome this is to use an even number scaling system, as there is no midpoint. On the other hand, it could be argued that if respondents wish to sit on the fence and choose a mid-point, then they should be given the option to do so (p. 327).

L. Cohen et al. (2007) do argue that this takes away the option for participants to choose a mid-point. It was decided that the benefit of using a 6-point scale corresponded better with the distinction between a skills-based versus emergent

perspective. The options on the scale in the present study were (1) strongly agree, (2) agree, (3) somewhat agree, (4) somewhat disagree, (5) disagree and (6) strongly disagree.

The overall objective of the measure is to measure whether parents' beliefs are congruent with an emergent/holistic perspective, with high scores representing an emergent/holistic perspective. The possible minimum and maximum scores were 33 and 198 respectively. However, there were two sets of items in the PPLLIS that produced opposite scores.

J. Anderson (1995a) classified the following items as skills-based:

1 / 2 / 3 / 7 / 9 / 11 / 12 / 13 / 14 / 15 / 17 / 19 / 20 / 23 / 30 / 32 / 33.

Participants who disagreed with these skill-based items, would have selected from responses 4 (somewhat disagree), 5 (disagree) or 6 (strongly disagree). All scores were added together to form a composite PPLLIS score. Thus, parents who disagreed with skill-based items, scored higher on the scale. Alternatively, higher scores denoted an emergent perspective.

The following items were classified as emergent/holistic:

4 / 5 / 6 / 8 / 10 / 16 / 18 / 21 / 22 / 24 / 25 / 26 / 27 / 28 / 29 / 31.

Parents who agreed with these items, would have selected from options 1 (strongly agree), 2 (agree) or 3 (somewhat agree) on the Likert scale and thus achieved relatively lower scores. All responses were placed on the same scale, but in order to have consistency in the scoring, it was necessary to reverse the scores for the emergent items. Participants who selected 1 (strongly agree), received a score of 6. Participants who selected 2 (agree), received a score of 5 and participants who

selected 3 (somewhat agree), received a score of 4. This ensured that participants with emergent views obtained high scores to meet the overall objective of the PPLLIS, namely to measure whether parents have views that are congruent with an emergent/holistic view of literacy acquisition.

### **3.3.4 Potential Bias in the Measure**

The PPLLIS was previously used in Canada with various immigrant and ethnic groups, First Nations and Euro-Canadians (J. Anderson, 1994, 1995a; Lynch et al., 2006), as well as Hispanic and African-American parents in the USA (Duren, 2006). As an interview schedule, this was the method of data collection used by Anderson and colleagues, but Duren used a paper format questionnaire.

In the present study, the questionnaire was published online using the Qualtrics Survey Software made available by the University of Canterbury. The main reasons were that it was an inexpensive method that allowed nationwide distribution and quick access for the participants. A Chinese translation was made available to participants, but it was not used.

Self-reporting by parents created the potential for subjective bias in the measure, such as social desirability, but any bias was minimised by the summing of the participants' scores on the 33 items (Creswell, 2012).

### **3.3.5 Reliability**

J. Anderson (1995a) reported that the PPLLIS has good internal consistency. He reported a Cronbach alpha coefficient of .85. In the current study, the Cronbach alpha coefficient was .83, which exceeded Nunally's recommendation of .7 for exploratory research (as cited in Cortina, 1993). None of the items were therefore deleted. Table 3

lists the analysis, which shows that the alpha could have been increased to .85 if item 1 or 6 were to be deleted from the questionnaire.

Table 3

*Reliability Analysis for the 33 PPLIS Items*

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	84.57	228.44	-.28	.85
2	82.86	209.75	.23	.83
3	82.47	201.76	.44	.83
4	82.36	223.74	-.18	.85
5	85.58	213.02	.25	.83
6	81.88	232.64	-.44	.85
7	85.23	210.80	.28	.83
8	85.70	212.62	.34	.83
9	83.09	200.71	.39	.83
10	85.18	210.79	.27	.83
11	84.39	198.22	.49	.82
12	83.35	200.75	.40	.83
13	84.51	197.39	.52	.82
14	84.58	196.67	.55	.82
15	83.80	191.21	.60	.82
16	85.05	208.76	.30	.83
17	84.11	193.62	.56	.82
18	85.32	205.51	.44	.83
19	83.04	198.30	.50	.82
20	84.98	203.18	.47	.83
21	84.42	206.39	.33	.83
22	84.96	211.66	.20	.83
23	84.69	205.37	.38	.83
24	85.43	209.46	.38	.83
25	85.35	204.54	.51	.83
26	85.38	205.99	.48	.83
27	85.02	203.23	.49	.83
28	85.34	208.11	.43	.83
29	85.68	209.48	.52	.83
30	85.14	201.62	.50	.82
31	85.58	212.83	.28	.83
32	84.83	202.11	.44	.83
33	83.55	207.29	.25	.83

### **3.3.6 Validity**

Evidence from studies by J. Anderson (1995a), Lynch et al., (2006) and Duren (2006) suggests the PPLLIS is valid for measuring parents' beliefs about their children's English literacy acquisition. Parents who started the questionnaire but did not finish it in one sitting were reminded after two weeks to finish the questionnaire within two weeks, to control for the threat of maturation. Furthermore, J. Anderson (1995a) reported that "two university professors whose expertise is in early literacy reviewed the instrument to establish face validity and content validity" (p. 211). External validity was limited because the sample was not representative of the New Zealand population because the Māori and Pacific Island ethnic groups were under-represented.

### **3.4 Participants and Sampling**

The participants in this study were the parents of children under the age of seven, who reside in New Zealand. Immigrants and sojourners were also invited to participate and were categorised as immigrants. Invitations to participants and the questionnaire cover sheet, requested that the parent who spends the most time with the child promoting English literacy complete the questionnaire. The term caretaker is often used in research to include grandparents, siblings and other family members who help the child, but the focus in this study was limited to one parent only to explore specifically the relations between the immediate demographic variables and the home literacy environment. For example, a grandparent's income may not directly affect the number of books in the home.

The population for this study was parents of children under the age of seven, living in

New Zealand at the time of the study. The sampling frame from which this sample was drawn, included immigrant and sojourner parents. Parents with children in early childhood centres, day care centres and primary schools, etc. throughout New Zealand were targeted. Approximately 2750 emails were sent to, for example, school principals, early childhood franchise owners or executives, early childhood centre managers, community centres and organisations, social media groups and leaders of church congregations. They were requested to forward an invitation in English, or a Chinese translation if appropriate, to parents. Appendix B contains a copy of the email to principals, and Appendix C, a copy of the invitation to parents to participate in the study.

Recruitment was dependant on gatekeepers, such as principals, forwarding the invitation to teachers to then further distribute it to parents in accordance with a volunteer sampling strategy. Gift vouchers, guidelines on home-based literacy activities and a summary report of the study were offered to participants as incentives. Incentives may have created response bias. Parents who expressed an interest in the study, were first presented with information and consent forms and upon receipt of the completed consent form, presented with a link to access the questionnaire online. During the second recruitment phase, consent was included in the online questionnaire to facilitate parents' access.

The final sample consisted of 300 respondents. Due to non-response, attrition, respondent mortality, exclusion of parents with a child older than seven and significant missing data, another 76 parents did not complete the questionnaire.

Use of an online questionnaire created the potential for “demographical bias that

favoured groups that tend to use computers” (Creswell, 2012, p. 384). The sample was not representative of the population with certain ethnic groups not participating in the study. It is therefore not possible to generalise the results to the population with any level of confidence (L. Cohen et al., 2007, p. 116).

### **3.5 Procedures**

#### **3.5.1 Procedures Prior to Data Collection**

An ethics application was submitted to the University of Canterbury Educational Research Human Ethics Committee (ERHEC) and ethics approval was granted (Ref: 2014/52/ERHEC) (Appendix A). Information and consent forms were prepared for immigrant Chinese parents and children under the age of five, as the initial design for the study included measuring parents’ home literacy beliefs, activities and children’s outcomes within the Christchurch area. Permission to use the PPLLIS was requested from Anderson and granted (refer to Appendix B for a copy of the email). The full online questionnaire, including the items from the PPLLIS (Appendix C), was prepared and uploaded to the Qualtrics survey software and tested. A Chinese translation was also prepared and uploaded, but it was never used.

A pilot study was conducted, but limited access to young children for measuring outcomes and the long duration to conduct individual testing necessitated a re-evaluation of the goals for the study. Assessing parents’ home literacy activities and child outcomes were therefore abandoned. The study was changed to include immigrant parents of children under the age of seven, nationwide. Emails were sent to gate-keepers at primary schools (principals) (Appendix D), kindergartens and preschools, churches and community organisations. The email included an invitation

in the form of a PDF attachment to immigrants (Appendix E). Parents of children under the age of seven were invited to participate in the study. They were requested to contact the researcher directly. Information and consent forms were emailed to parents who contacted the researcher for additional information or who expressed an interest to participate in the study. Upon receiving the completed consent form, a link and password to the online questionnaire were sent to parents. This recruitment resulted in 71 parents completing the questionnaire, which was deemed inadequate for inferential statistical analysis. Another change was made to the parameters of the study. The study was opened up to all parents of children under the age of seven, who were living in New Zealand at the time.

### **3.5.2 Procedures during Data Collection**

Follow-up emails and up to three reminders were sent to parents who started surveys, but who failed to complete them after a period of two weeks.

### **3.5.3 Procedures after Data Collection**

Data were downloaded from the online Qualtrics server and cleaned up in Microsoft Excel after closing the survey. In order to test the missing data for randomness, the chi-square statistic missing completely at random (MCAR) (Little, 1988) was used, resulting in  $\chi^2 = 140.679$  ( $df = 127$ ;  $p = .192$ ). This indicated that the missing data were MCAR. To replace missing data, the expectation minimization method was used instead of multiple imputation.

Data not used in the analysis included number of books in the home, child interest, frequency and types of activities to promote home literacy. This was due to the time constraints of processing large volumes of qualitative data in the open ended question.



Instead of a broad approach, it was decided to limit the focus on parents' home literacy beliefs and complete an in-depth study.

### **3.6 Summary**

The Statistical Package for Social Science (SPSS versions 23 and 24) software was used to conduct statistical analyses of the data with the aim of the study to answer four research questions. Alpha levels were set at .05 for all tests. The results of these tests are reported in the next chapter.

## **CHAPTER 4**

### **RESULTS**

As an introduction to this chapter, the demographic characteristics of the participants and responses to the PPLLIS are first summarised. Thereafter, the results for each of the four research questions are presented. Finally, additional results generated by questions from the ANOVA analyses are summarised.

#### **4.1 Characteristics of the Participants**

The demographic data that describe the participants are introduced below. The descriptive data for the categorical variables (education, income, parent gender, immigration status, home language and child gender), including separate data for New Zealand born and immigrant parents, are summarised in Tables 4.1 – 4.6. The descriptive data for all the continuous variables (parents' age, months helping the child, child age and PHLBs) are summarised in Table 5.

##### **4.1.1 Parent Level of Education**

In this sample there were more participants with higher levels of education. The modal response of the participants (48%) was a 3- or 4-year university degree. Education levels were adjusted to two categories to meet the assumption of using dichotomous variables (parents with education up to secondary level and those with tertiary qualifications) for the regression analysis. One participant failed to respond to this question. Descriptive statistics for education are summarised in Table 4.1.

Table 4.1

*Descriptive Statistics for Education*

	Immigration Status					
	NZ Born		Immigrants		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n/N</i>	%
1 Elementary school	2	1.2			2	.7
2 High school	15	9.1	9	6.6	24	8.0
3 College diploma	30	18.3	17	12.5	47	15.7
4 Undergraduate degree	90	54.9	55	40.4	145	48.3
5 Post-graduate degree	26	15.9	54	39.7	80	26.7
Total	163	99.4	135	99.3	298	99.3
Missing	1	.6	1	.7	2	.7
Total	164	100.0	136	100.0	300	100.0

**4.1.2 Household Income per Annum**

Missing values on income accounted for 11.3% of responses. A high percentage (7%) of participants were in the very high income brackets (\$250,000 p.a. and over), which created a skewed distribution. To meet the assumption of using dichotomous variables for regression analysis, the income bands were adjusted to two categories (under-, \$50,000 and over). This calculation was based on an average New Zealand salary or wage of \$882 per week, which equates to an annual income of \$45,864 (Statistics New Zealand, 2015). The next income category after \$45,864 was \$50,000 and this was used to calculate below and above average annual income. Descriptive statistics for income are summarised in Table 4.2.

Table 4.2  
*Descriptive Statistics for Income*

	Immigration Status					
	NZ Born		Immigrants		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n/N</i>	%
1 \$0	—	—	3	2.2	3	1.0
2 \$1-24,999	13	7.9	6	4.4	19	6.3
3 \$25,000-49,999	23	14.0	32	23.5	55	18.3
4 \$50,000-74,999	24	14.6	18	13.2	42	14.0
5 \$75,000-99,999	26	15.9	16	11.8	42	14.0
6 \$100,000-124,999	18	11.0	11	8.1	29	9.7
7 \$125,000-149,999	16	9.8	8	5.9	24	8.0
8 \$150,000-174,999	8	4.9	8	5.9	16	5.3
9 \$175,000-199,999	4	2.4	3	2.2	7	2.3
10 \$200,000-224,999	5	3.0	1	.7	6	2.0
11 \$225,000-249,999	1	.6	1	.7	2	.7
12 \$250,000-274,999	2	1.2	1	.7	3	1.0
13 \$275,000-299,999	6	3.7	5	3.7	11	3.7
14 \$300,000 +	2	1.2	5	3.7	7	2.3
Total	148	90.2	118	86.8	266	88.7
Missing	16	9.8	18	13.2	34	11.3
Total	164	100.0	136	100.0	300	100.0

### 4.1.3 Parent Gender

Instructions to the participants requested that the questionnaire be completed by the parent who spends the most time with the child promoting English reading and writing. The majority of respondents were female (91.3%) with a limited number of males completing the questionnaire (8.7%). This figure for male participants corresponds with previous research (B. M. Phillips & Lonigan, 2009). Descriptive statistics for parent gender are summarised in Table 4.3.

Table 4.3  
*Descriptive Statistics for Parent Gender*

	Immigration Status					
	NZ Born		Immigrants		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n/N</i>	%
1 Male	8	4.9	18	13.2	26	8.7
2 Female	156	95.1	118	86.8	274	91.3
Total	164	100.0	136	100.0	300	100.0

#### 4.1.4 Immigration Status

The majority of respondents (54.7%) were locally born parents, whilst immigrants made up 45.3% of the respondents. Descriptive statistics for immigration status are summarised in Table 4.4.

Table 4.4  
*Descriptive Statistics for Immigration Status*

	<i>n/N</i>	%
1 NZ Born	164	54.7
2 Immigrants	136	45.3
Total	300	100.0

#### 4.1.5 Home Language

A total of 32 languages were recorded as the participant's main home language. Main home languages were divided into two categories to meet the assumptions of using dichotomous variables for regression analysis. These categories were English as a main home language (English L1) or other main home languages (Other L1). English was the main home language for 70% of all respondents. 33.8% of immigrants indicated English as the respondent's main home language. Descriptive statistics for home language are summarised in Table 4.5.

Table 4.5

*Descriptive Statistics for Home Language*

	Immigration Status					
	NZ Born		Immigrants		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n/N</i>	%
1 English L1	164	100.0	46	33.8	210	70.0
2 Other L1	–	–	90	66.2	90	30.0
Total	164	100.0	136	100.0	300	100.0

**4.1.6 Child Gender**

Participants with girls were in the majority (54.9%). Respondents who have boys were 45.1% of the sample. Descriptive statistics for child gender are summarised in Table 4.6.

Table 4.6

*Descriptive Statistics for Child Gender*

	Immigration Status					
	NZ Born		Immigrants		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n/N</i>	%
1 Male	74	45.1	67	49.3	141	47.0
2 Female	90	54.9	69	50.7	159	53.0
Total	164	100.0	136	100.0	300	100.0

#### **4.1.7 Parent Age**

Parent's age was calculated by the difference between their year of birth and when they completed the questionnaire. The youngest parent was 26 years old and the oldest was 51. The average age of the participants was 38 years. Eight parents did not respond to this item. Two outliers that exceeded the Mahalanobis critical value for nine independent variables (Tabachnick & Fidell, 2007) were deleted and excluded from all the analyses.

#### **4.1.8 Months Helping the Child**

Parents were asked to estimate the number of months that they have been helping their child to promote their English reading and writing ability. Seven parents indicated that they do not help their children and this was unrelated to their children's age. Six of these parents were immigrants and one was New Zealand born. Two parents did not respond to this item.

#### **4.1.9 Child Age**

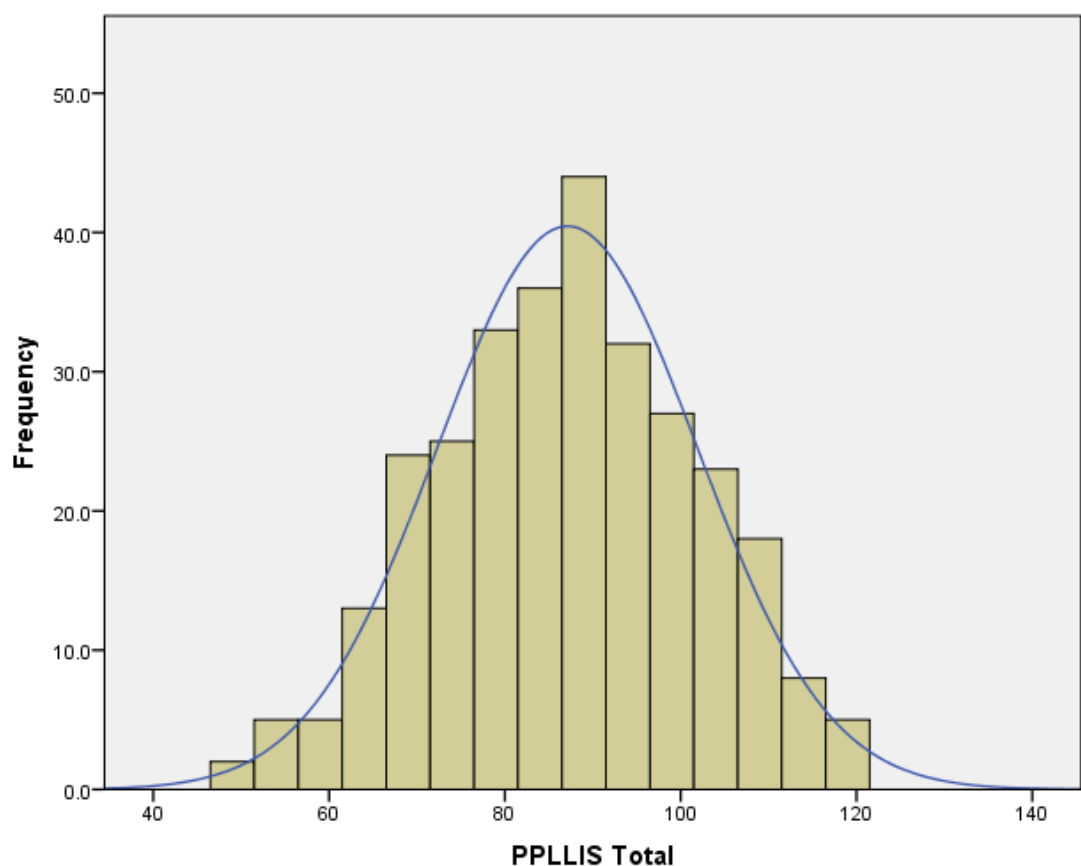
The majority of the respondents' children were in primary school. This bias was created by recruiting parents through schools. The average age of the children was approximately 65 months and 37 children were under the age of five.

#### **4.1.10 Parents' Home Literacy Beliefs**

The lowest possible score on the PPLLIS questionnaire was 33 and the highest 198. Figure 2 shows a normal distribution of these scores. A theoretical mid-point or median of 115.5 for the Likert scale was calculated between points three (somewhat agree) and four (somewhat disagree) on the questionnaire. Participants whose overall



PHLB scores were lower than this mid-point were deemed to have a skills-based perspective and those with scores at or higher than the mid-point were characterised as having an emergent perspective. The mean for all the participants' PHLBs was 87.11 ( $SD = 14.79$ ). Thus, parents in New Zealand have on average, a skills-based perspective of their children's literacy acquisition. Descriptive statistics for the continuous variables are summarised in Table 5.



*Figure 2*  
Histogram of the distribution of PHLB scores on the PPLLIS.  
( $M = 87.11$ ;  $SD = 14.79$ ;  $N = 300$ )

Table 5

*Descriptive Statistics for the Continuous Variables*

	<i>n/N</i>	Min	Max	<i>M</i>	<i>SD</i>
<b>NZ-Born</b>					
Parent Age	163	26	51	38.71	5.03
Child Age Months	164	16	83	65.41	13.57
Months Helping Child	163	0	81	38.02	21.82
PPLLIS	164	49	110	81.23	12.95
Valid <i>N</i> (listwise)	162				
<b>Immigrants</b>					
Parent Age	129	27	51	37.88	5.06
Child Age Months	136	6	83	64.15	15.93
Months Helping Child	135	0	83	26.98	21.11
PPLLIS	136	56	121	94.20	13.77
Valid <i>N</i> (listwise)	128				
<b>Total</b>					
Parent Age	292	26	51	38.34	5.05
Child Age Months	300	6	83	64.84	14.67
Months Helping Child	298	0	83	33.02	22.16
PPLLIS	300	49	121	87.11	14.79
Valid <i>N</i> (listwise)	290				

## **4.2 Study Results for Research Questions and Hypotheses**

### **4.2.1 Research Question 1**

**Are the demographic factors education, income, parent gender and age, immigration status, home language, months helping child, child gender and age associated with parents' home-literacy beliefs?**

The association between the nine independent variables and PHLBs as measured by the *Parents' Perceptions of Literacy Learning Interview Schedule* (PPLLIS) was investigated using point-biserial correlation coefficients for the categorical variables and Spearman rank order coefficients for the ordinal and scale variables. The skew in the continuous independent variables (parent age, child age and number of months the parent has been helping the child), which was evident in the histograms and the uneven number of cases in the groups for the dichotomous variables made use of the Pearson correlation coefficient statistic inappropriate. The strict assumptions, including normality and homoscedasticity of the Pearson correlation, do not apply when using the Spearman correlation (Pallant, 2010). Pairwise deletion was used to account for missing data for the 300 participants. These data are represented in Table 6. The relationships between the independent variables and PHLBs are summarised next and graphically represented in Figures 4-12.

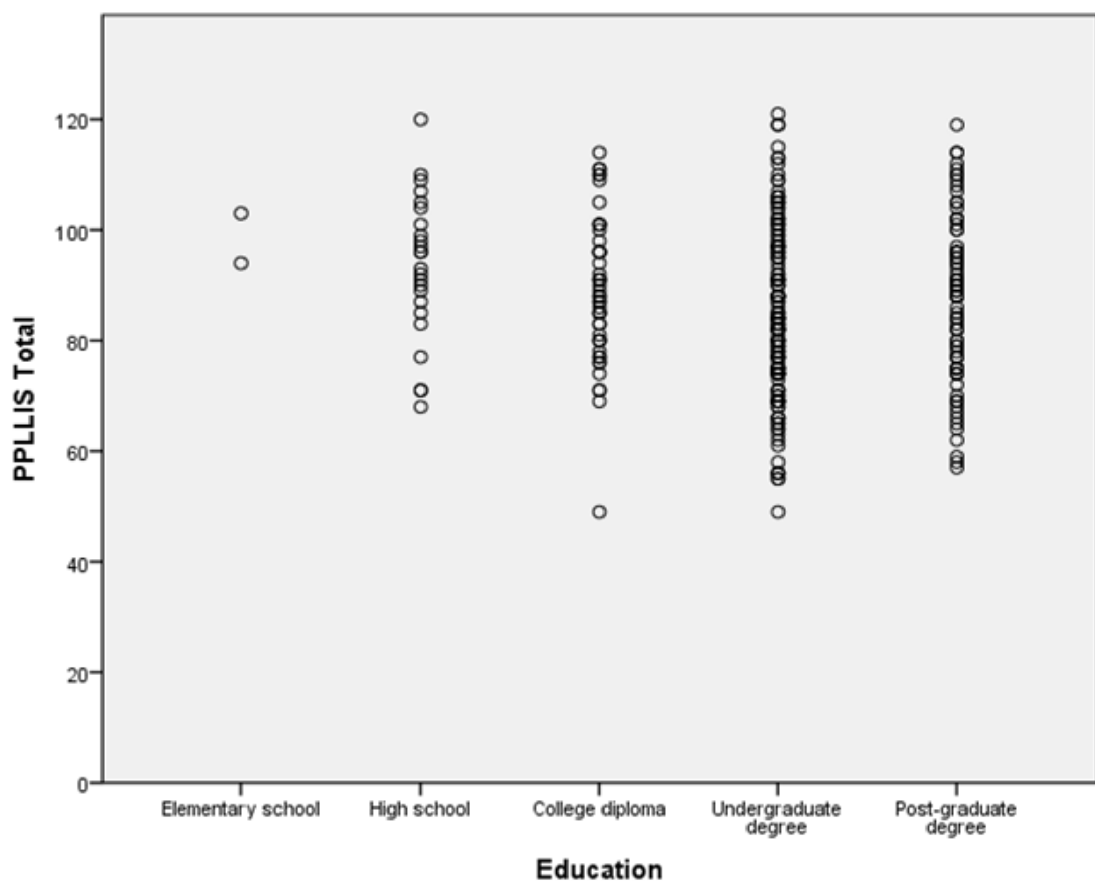
Table 6

*Correlations for the Independent Variables and PHLBs*

	1	2	3	4	5	6	7	8	9	10
1 Education	—	.22**	-.16**	.18**	.24**	.20**	-.03	-.06	.04	-.09
2 Income		—	.01	.34**	-.07	-.21**	.14*	.01	.13*	-.09
3 Parent Gender			—	-.08	-.15*	-.19**	.16**	.04	.02	-.14*
4 Parent Age				—	-.10	-.26**	.21**	.05	.26**	-.15**
5 ImmigrationStatus					—	.72**	-.27**	-.04	-.01	.43**
6 Home Language						—	-.36**	-.04	-.01	.50**
7 Helping Months							—	.00	.34**	-.30**
8 Child Gender								—	-.06	-.08
9 Child Age									—	.05
10 PPLLIS										—

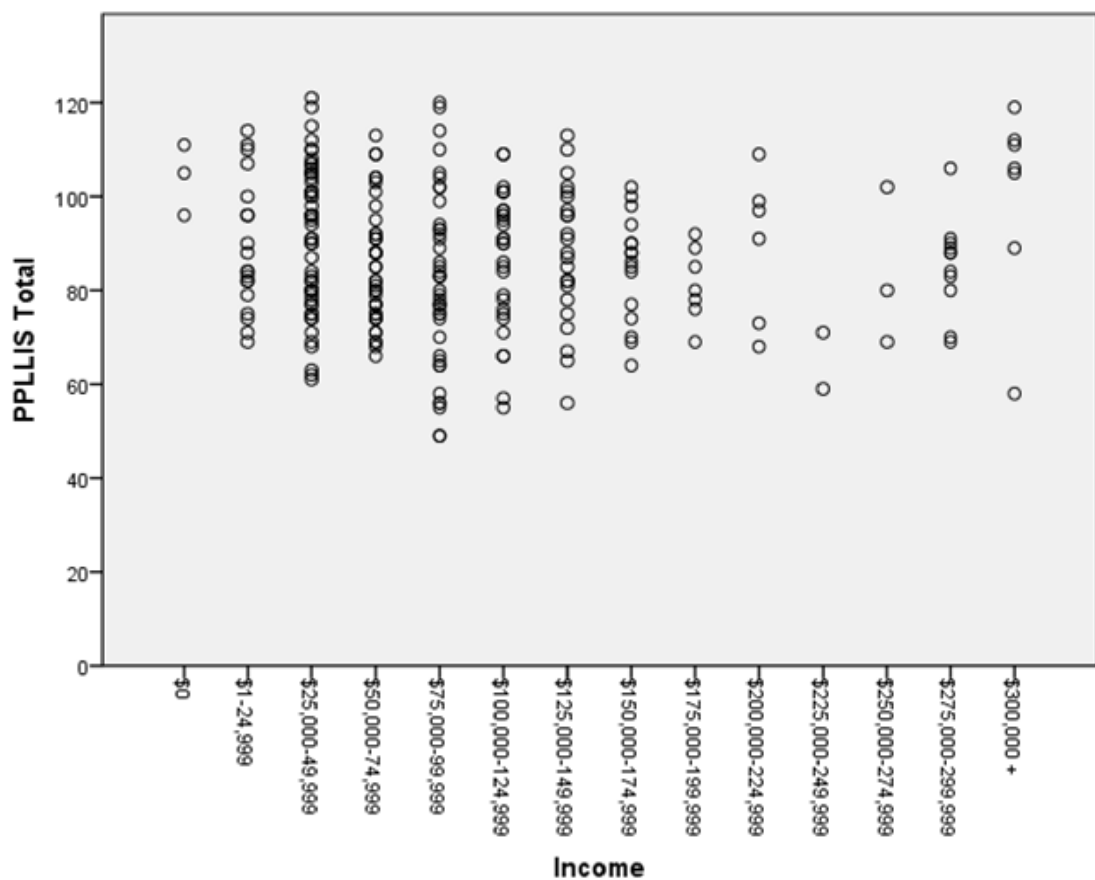
*Note.* \* $p < .05$ . \*\* $p < .01$ . PPLLIS = Parents' Home Literacy Belief Scores.

The association between **parents' level of education and PHLBs** was negative, weak and statistically non-significant,  $r_s(298) = -.09, p = .131$ . Parents with higher levels of education, i.e. degrees and post-graduate degrees, scored slightly lower than parents with levels of school education, which suggests that higher levels of education are associated with generally an increased in skills-based views. This association is graphically represented in Figure 3.



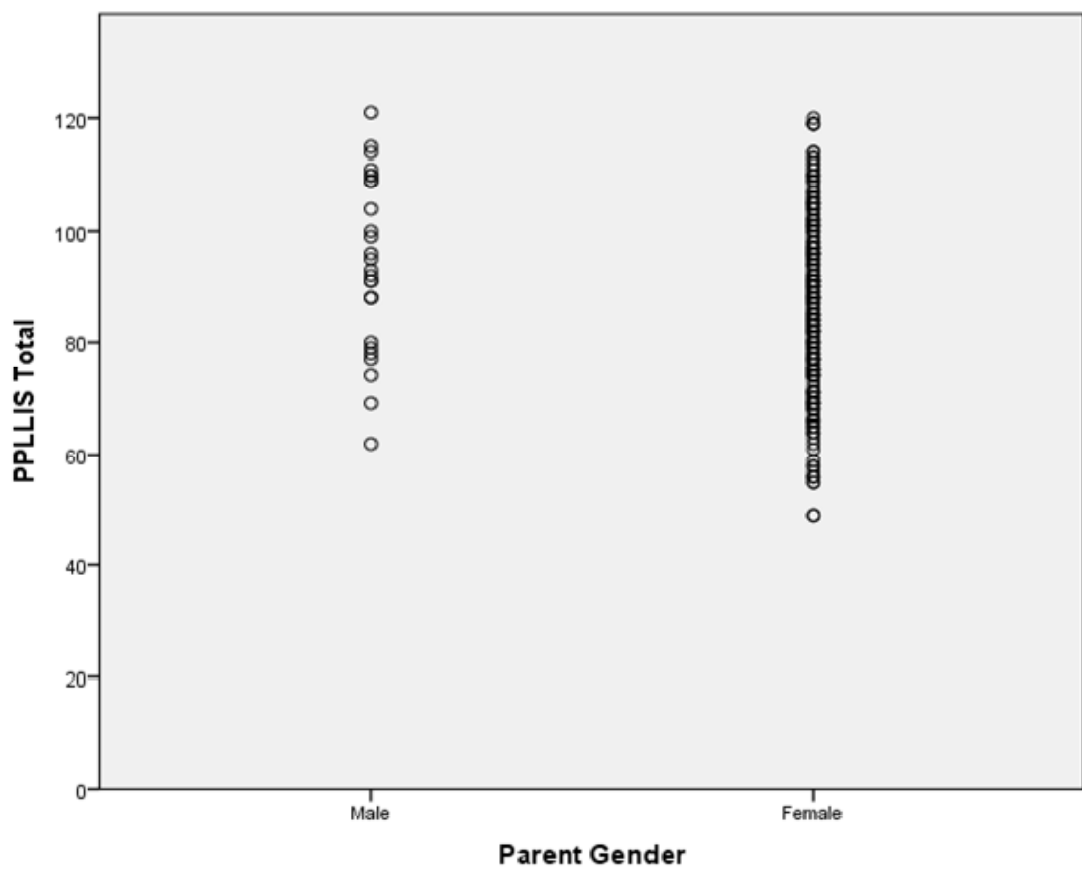
*Figure 3*  
The association between parents' level of education and PHLBs.

The association between **household income and PHLBs** was negative, weak and statistically non-significant,  $r_s(266) = -.09, p = .15$ . Parents with higher levels of income, scored on average slightly lower than parents who earn less. Increases in parents' income correspond on average with increases in a skills-based view. This association is graphically represented in Figure 4.



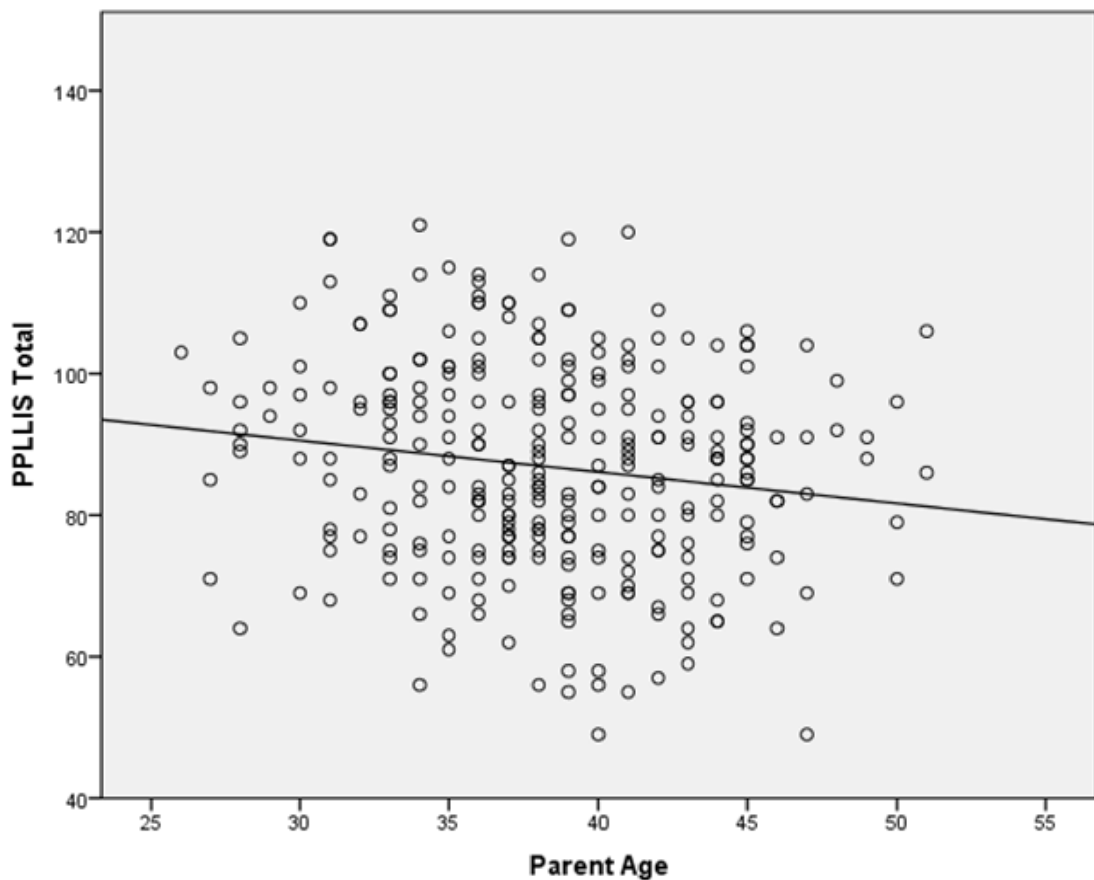
*Figure 4*  
The association between household income and PHLBs.

The association between **parent gender and PHLBs** was negative, weak and statistically significant,  $r_{pb}(300) = -.14, p < .05$ . Males scored on average marginally higher on the PPLLIS than females, which indicates that their perspective was more emergent and thus focused on entertainment activities such as shared book reading. This association is graphically represented in Figure 5.



*Figure 5*  
The association between parents' gender and PHLBs.

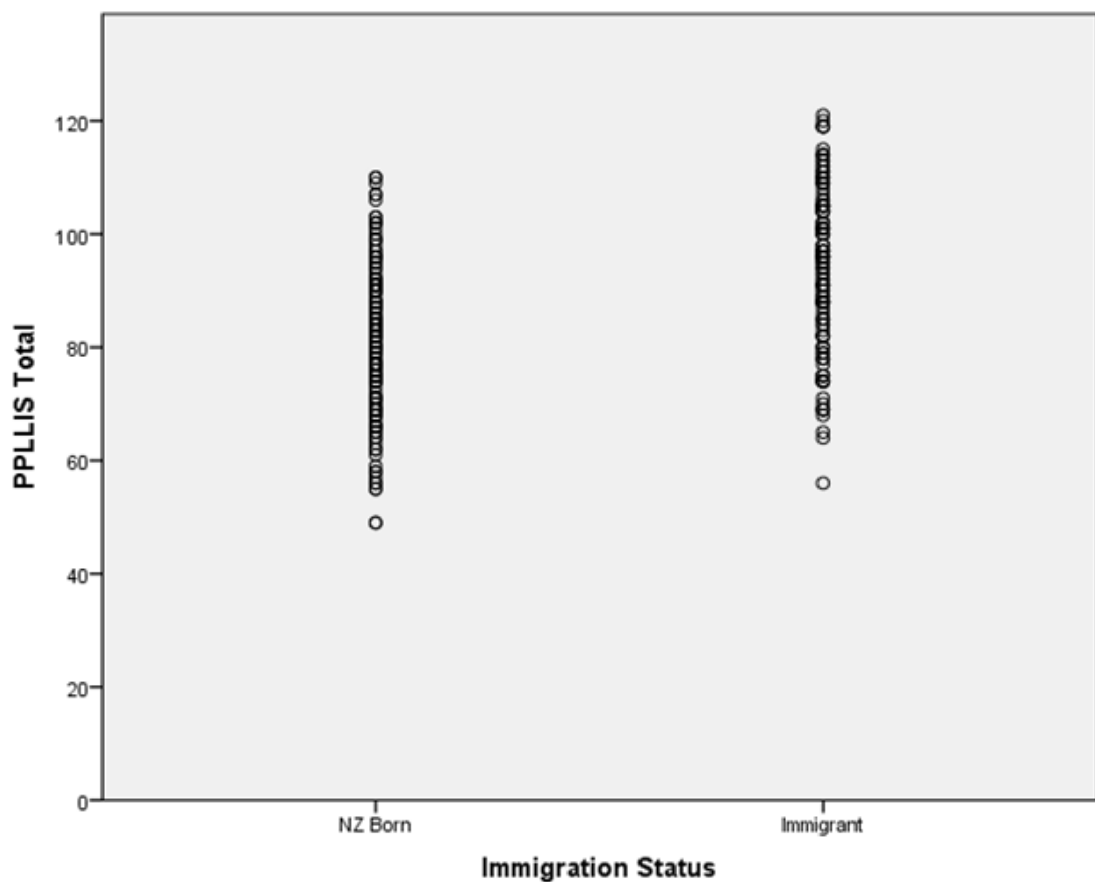
The association between **parent age (measured as year born)** and **PHLBs** was negative, weak and statistically significant,  $r_s(292) = -.15, p < .01$ . Older parents scored on average slightly lower on the PPLIS than younger parents. This suggests that older parents have a perspective that is generally more focused on skills. This association is graphically represented in Figure 6.



*Figure 6*  
The association between parents' age and PHLBs.  
 $R^2$  Linear = 0.023

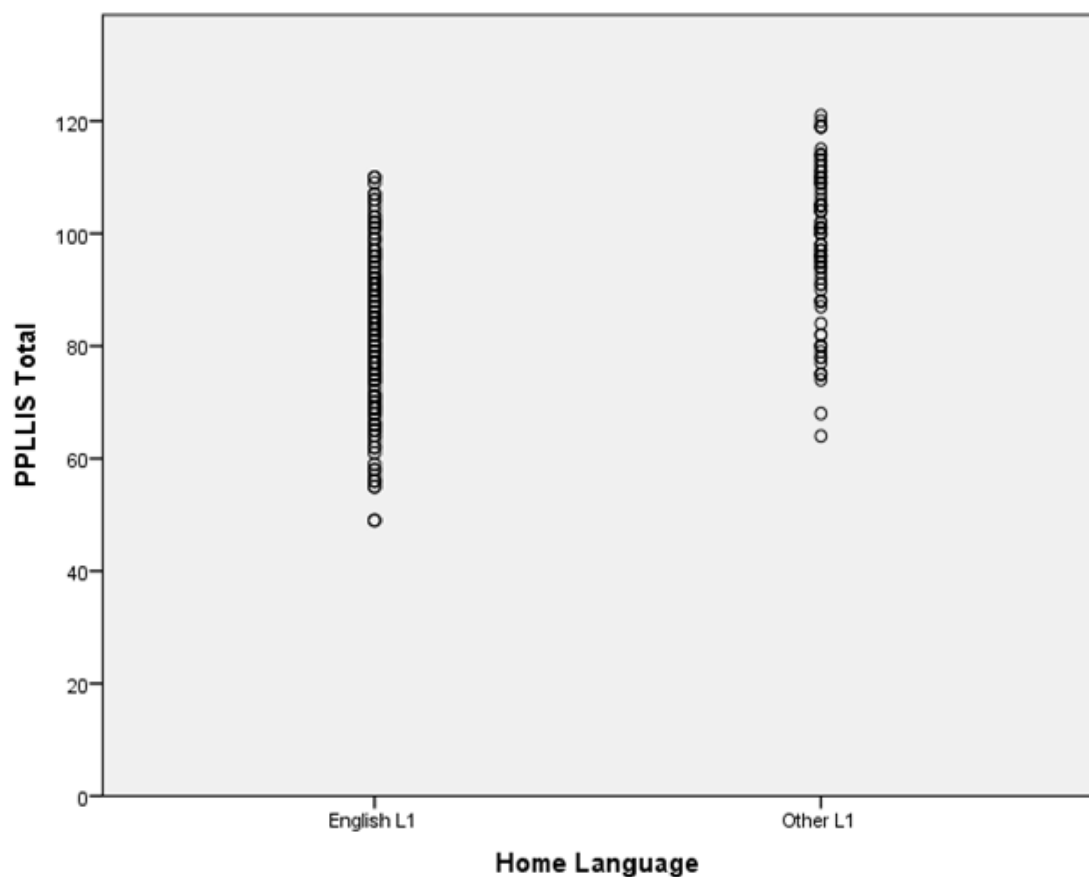


The association between parents' **immigration status and PHLBs** was positive, moderate and statistically significant,  $r_{pb}(300) = .43, p < .001$ . Parents who were born in New Zealand, scored on average significantly lower on the PPLLIS than immigrant parents. New Zealand born parents therefore have a view that is more focused on skills than immigrant parents. This association is graphically represented in Figure 7.



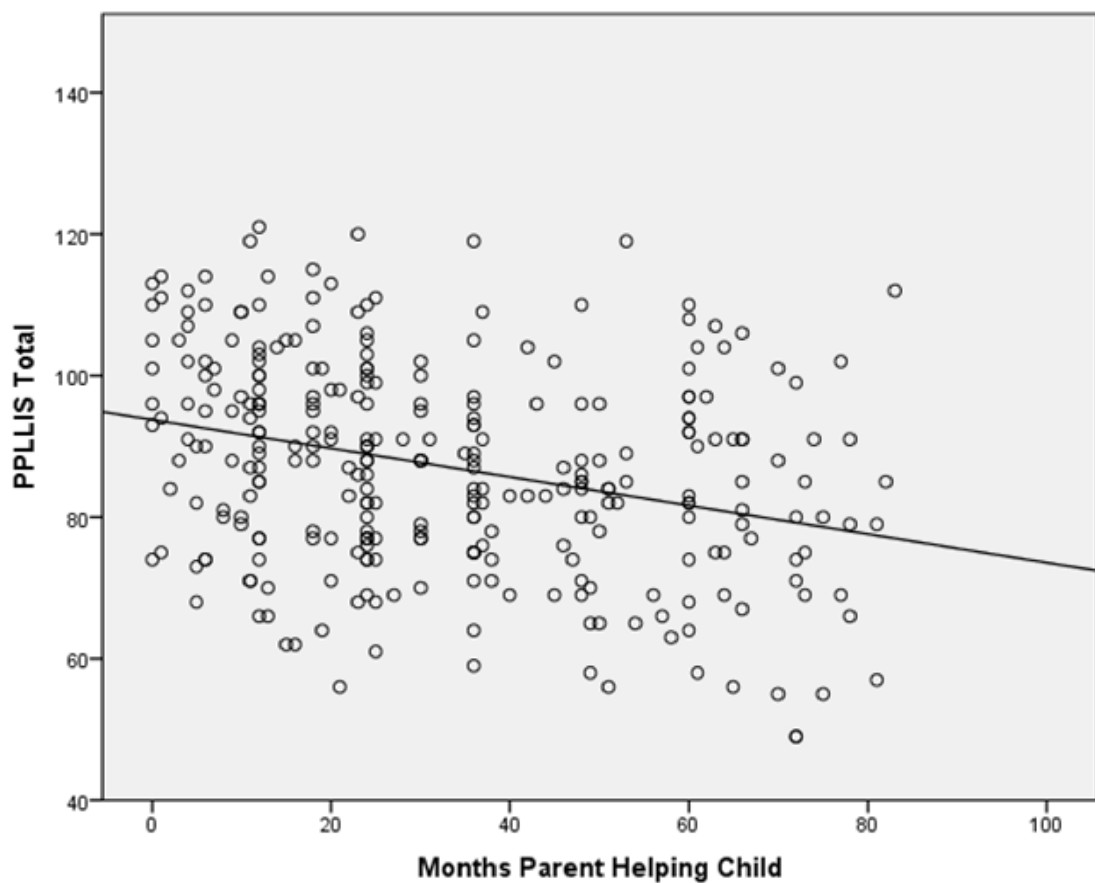
*Figure 7*  
The association between parents' immigration status and PHLBs.

The association between parents' **home language and PHLBs** was positive, moderate and statistically significant,  $r_{pb}(300) = .5, p < .001$ . Parents whose main home language is English, scored significantly lower on the PPLLIS than parents who speak a main home languages that is not English. Parents with English as L1 are thus more focused on development of their children's skills. This association is graphically represented in Figure 8.



*Figure 8*  
The association between home language and PHLBs.

The association between the **number of months parents have been helping their child and PHLBs** was negative, modest and statistically significant,  $r_s(298) = -.3, p < .01$ . Parents who have been helping their children longer, scored lower on the PPLLIS scale, which suggests that they have on average skills-based views, whereas parents who have not yet started helping their children with any activities, or who have only been doing so for shorter periods, have views that are generally less skills-based. This association is graphically represented in Figure 9.

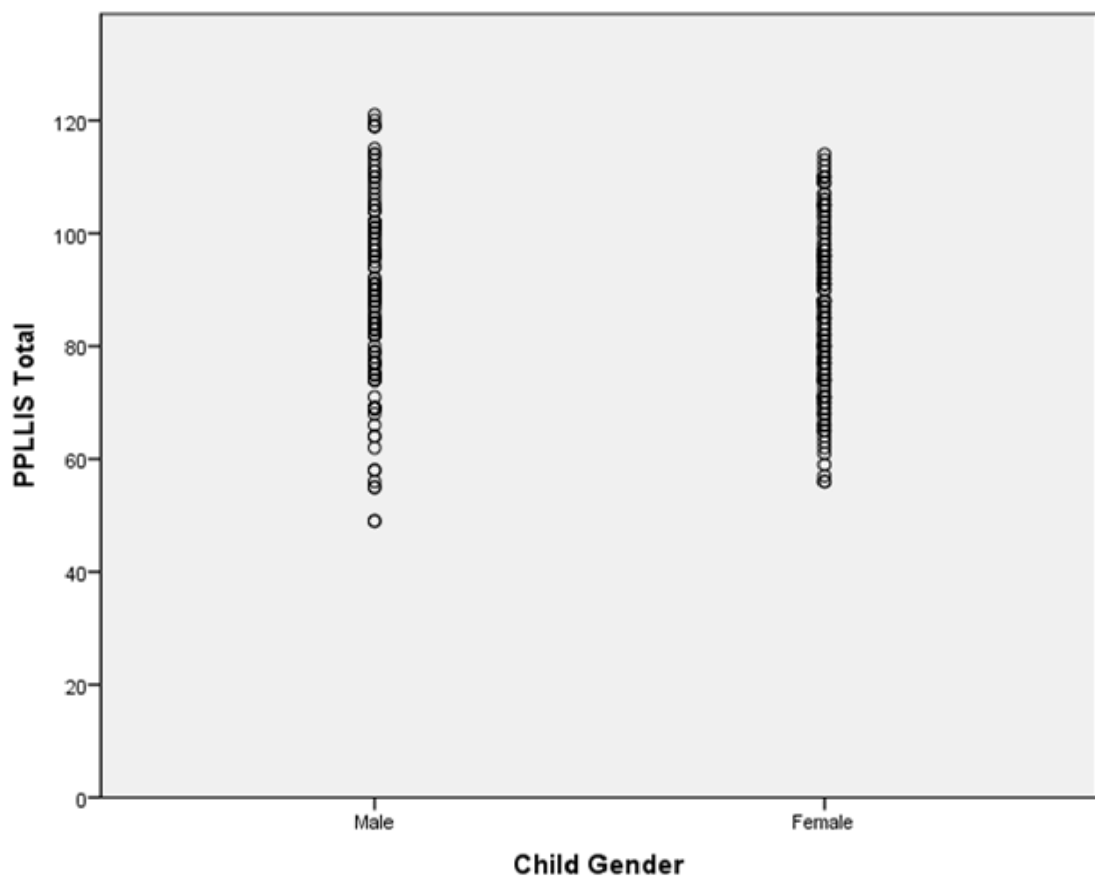


*Figure 9*

The association between the number of months parents have been helping their child and PHLBs.

$R^2$  Linear = 0.092

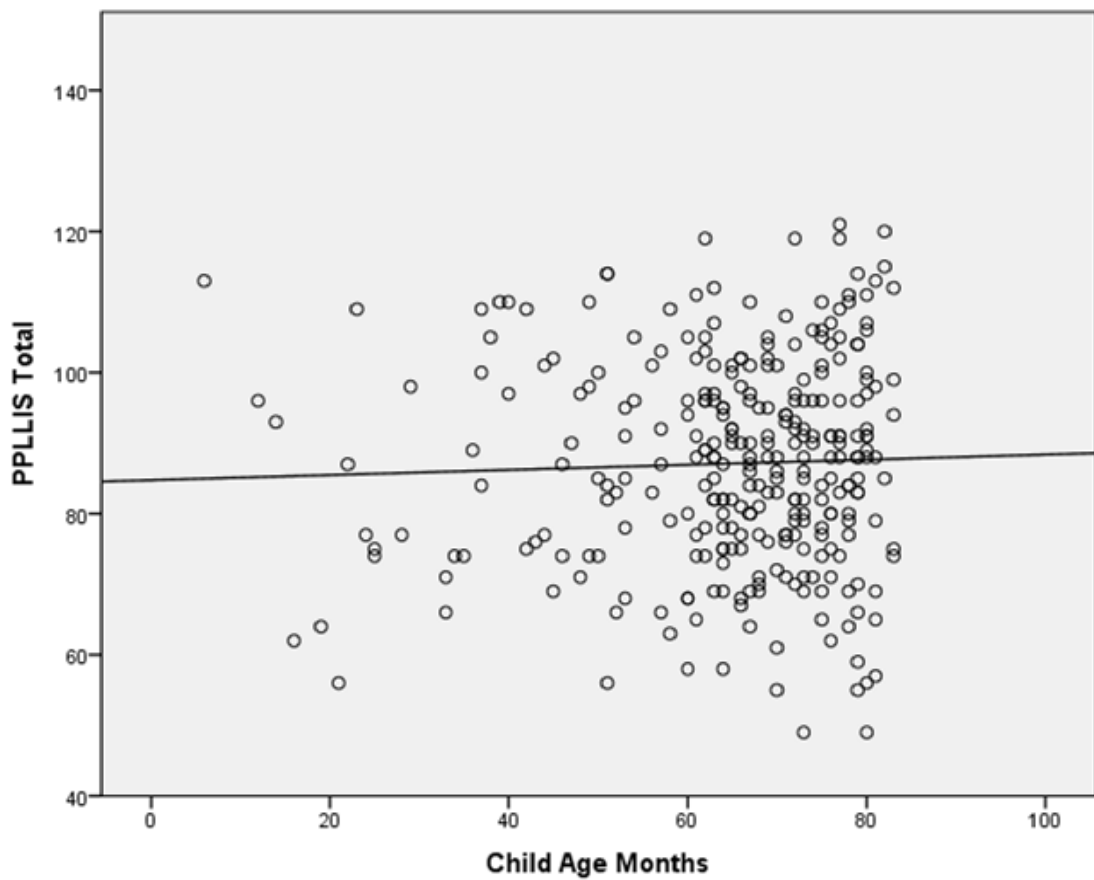
The association between **child gender and PHLBs** was negative, weak and statistically non-significant,  $r_{pb}(300) = -.08, p = .19$ . Parents with girls scored on average marginally lower on the PPLLIS than parents with boys. There was more variation in the scores of parents with boys. This association is graphically represented in Figure 10.



*Figure 10*

The association between child gender and PHLBs.

The association between **child age (number of months)** and **PHLBs** was positive, weak and statistically non-significant,  $r(300) = .05, p = .432$ . Parents with older children scored generally higher on the PPLIS scale than parents with younger children, but this difference was negligible. This association is graphically represented in Figure 11.



*Figure 11*  
The association between children's age and PHLBs.  
 $R^2$  Linear = 0.001

#### **4.2.2 Research Question 2**

**To what extent do education, income, parent gender and age, immigration status, home language, months helping the child, child gender and age predict parents' home literacy beliefs?**

Hierarchical multiple regression was performed to investigate the ability of ecological parent and child factors to predict PHLBs. Prior to performing the hierarchical multiple regression, the relevant assumptions were tested, including those for normality, linearity and homoscedasticity. Despite listwise deletion reducing the sample size ( $N = 254$ ), this was still deemed adequate for the nine independent variables included in this analysis (Tabachnick & Fidell, 2007). The assumption of singularity was met as the independent variables were not combinations of other independent variables. The Durbin-Watson test for independence of errors of prediction was satisfied (Field, 2009). Examination of the intercorrelations (represented in Appendix F) revealed that the independent variables were not highly correlated with each other. The correlations were weak to strong, ranging from  $r = -.0002, p = .499$  to  $r = .73, p < .001$ . This indicates that multicollinearity was unlikely to be a problem (Tabachnick & Fidell, 2007). All the predictor variables showed statistical correlation with PHLBs. This indicates that the data were suitable for reliable examination through multiple linear regression. The two-tailed correlations between the predictor variables and the dependent variable were weak to moderate, ranging from  $r = .13, p < .05$  to  $r = .47, p < .001$ . The collinearity statistics (i.e., Tolerance and VIF) were well within accepted limits, thus the assumption of multicollinearity was deemed to have been met (Field, 2009; Pallant, 2010).

Mahalanobis distance scores were examined and satisfied. The residual and scatter plots indicated that the assumptions of normality, linearity and homoscedasticity were all satisfied (Field, 2009; Pallant, 2010).

A three step, hierarchical multiple regression analysis was conducted with PHLBs as the dependent variable using the enter method. Household income and parent level of education were converted from ordinal into dichotomous variables and entered in Step 1 of the regression, based on theoretical grounds. The parent variables (gender, age, immigration status, home language and how long they have been helping their child) were entered in Step 2 and the child variables (gender and age) in Step 3. The education and income variables were entered in step one, because they have been identified in previous research as influential predictors, whilst the parent variables were deemed stronger than the child variables and therefore entered in Step 2.

The hierarchical multiple regression revealed that at Step 1, parent level of education and household income contributed significantly to the regression model,  $F(2, 251) = 6.4, p = .002$  and accounted for 4.9% of the variation in PHLBs. Introduction of the parent variables and how long they have been helping their child in Step 2, explained an additional 29.2% of variation in PHLBs. This change in  $R^2$  was significant,  $F(7, 246) = 18.15, p < .001$ . Finally, the addition of the child variables gender and age to the regression model in Step 3, explained an additional 2% of variation in PHLBs and this change in  $R^2$  square was also significant,  $F(9, 244) = 15.31, p < .001$ . Together the nine independent variables accounted for a statistically significant 36.1% of the variance in PHLBs  $F(9, 244) = 15.31, p < .001$ .

Five of the predictors in the final regression model, parent level of education ( $\beta = -.20, p < .001$ ), immigration status ( $\beta = .22, p < .01$ ), home language (EngL1-OtherL1) ( $\beta = .26, p < .01$ ), months helping the child ( $\beta = -.23, p < .001$ ) and child age ( $\beta = .14, p < .05$ ) were statistically significant. Effect sizes indicated by the beta weightings varied from weak to modest according to recommendations by Muijs (as cited in L. Cohen et al., 2007, p. 523). These statistics are summarised in Table 7.



Table 7

*Summary of the Hierarchical Regression Analysis*

Variable	B	SE B	$\beta$	<i>t</i>	<i>p</i>	R	R <sup>2</sup>	$\Delta R^2$
Step 1						.22	.05	.05
(Constant)	110.04	6.75		16.30	.000***			
Education	-8.22	3.16	-.16	-2.60	.010*			
Income50k	-4.52	2.06	-.14	-2.19	.029*			
Step 2						.58	.34	.29
(Constant)	95.52	10.55		9.06	.000			
Education	-10.65	2.73	-.21	-3.90	.000**			
Income50k	-1.31	1.82	-.04	-.72	.470			
Parent Gender	-2.64	2.87	-.05	-.92	.360			
Parent Age	0.05	0.17	.02	.32	.749			
ImmigrantStat	6.37	2.32	.21	2.74	.007**			
Home Language	9.08	2.69	.27	3.38	.001**			
MonthsHelping	-0.12	0.04	-.18	-3.30	.001**			
Step 3						.60	.36	.02
(Constant)	95.18	10.76		8.85	.000			
Education	-10.48	2.71	-.20	-3.87	.000***			
Income50k	-0.76	1.81	-.02	-.42	.674			
Parent Gender	-3.13	2.85	-.06	-1.10	.274			
Parent Age	-0.07	0.17	-.02	-.41	.679			
ImmigrantStat	6.53	2.30	.22	2.84	.005**			
Home Language	8.49	2.67	.26	3.18	.002**			
MonthsHelping	-0.16	0.04	-.23	-3.98	.000***			
Child Gender	-1.86	1.55	-.06	-1.20	.232			
Child Age	0.14	0.06	.14	2.40	.017*			

*Note.* *N* = 254. \**p* < .05. \*\**p* < .01. \*\*\* *p* < .001. Income50k = Household Income over and under \$50,000; ImmigrantStat = Immigration Status; MonthsHelping = Months Helping the Child.

### 4.2.3 Research Question 3

#### **Do groups present different home literacy beliefs in terms of the significant predictors?**

The statistically significant predictors that were identified in the regression analysis, (1) main home language, (2) immigration status, (3) number of months helping the child, (4) education and (5) children's age, were evaluated to answer this research question.

Hypothesis 1: Parents' home literacy beliefs are the same, irrespective of the parents' *main home language*.

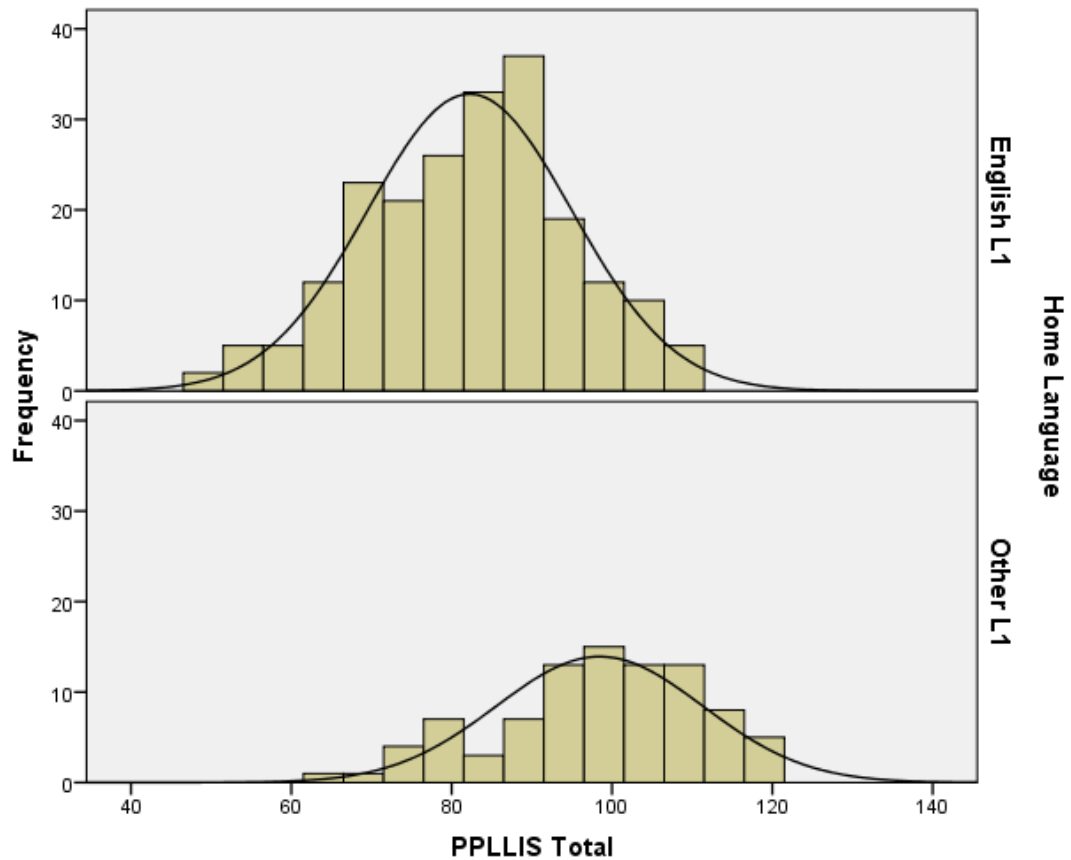
Parents were grouped into two categories in accordance with their main home language, English L1 ( $n = 210$ ) and Other L1 ( $n = 90$ ). To test the hypothesis that parents have the same/similar home-literacy views, an independent-samples  $t$ -test was performed to compare their home-literacy belief (PPLLIS) scores. Both distributions were sufficiently normal for the purposes of conducting a  $t$ -test, i.e., skew  $< |2.0|$  and kurtosis  $< |9.0|$  respectively (Schmider, Ziegler, Danay, Beyer, & Bühner, 2010).

Figure 12 shows a comparison of the distributions of English L1 and Other L1 PHLBs. The assumption of homogeneity was tested and satisfied in a Levene's  $F$  test,  $F(1, 298) = .001, p = .98$ .

The two-tailed, independent samples  $t$ -test revealed a statistically significant difference between the PPLLIS scores of English L1 ( $M = 82.24, SD = 12.77$ ) and Other L1 ( $M = 98.46, SD = 12.90$ );  $t(298) = -10.05, p < .0001$ . The magnitude of the difference in the means (mean difference =  $-16.21$ , 95% CI:  $-19.39$  to  $-13.04$ ) was very large ( $d = 1.26$ ) (J. Cohen, 1992).

The hypothesis that English L1 and Other L1 PHLBs are the same was rejected.

English L1 PHLBs were on average more skill-based and traditional than those of parents who speak other languages as L1. They held on average a more emergent perspective.



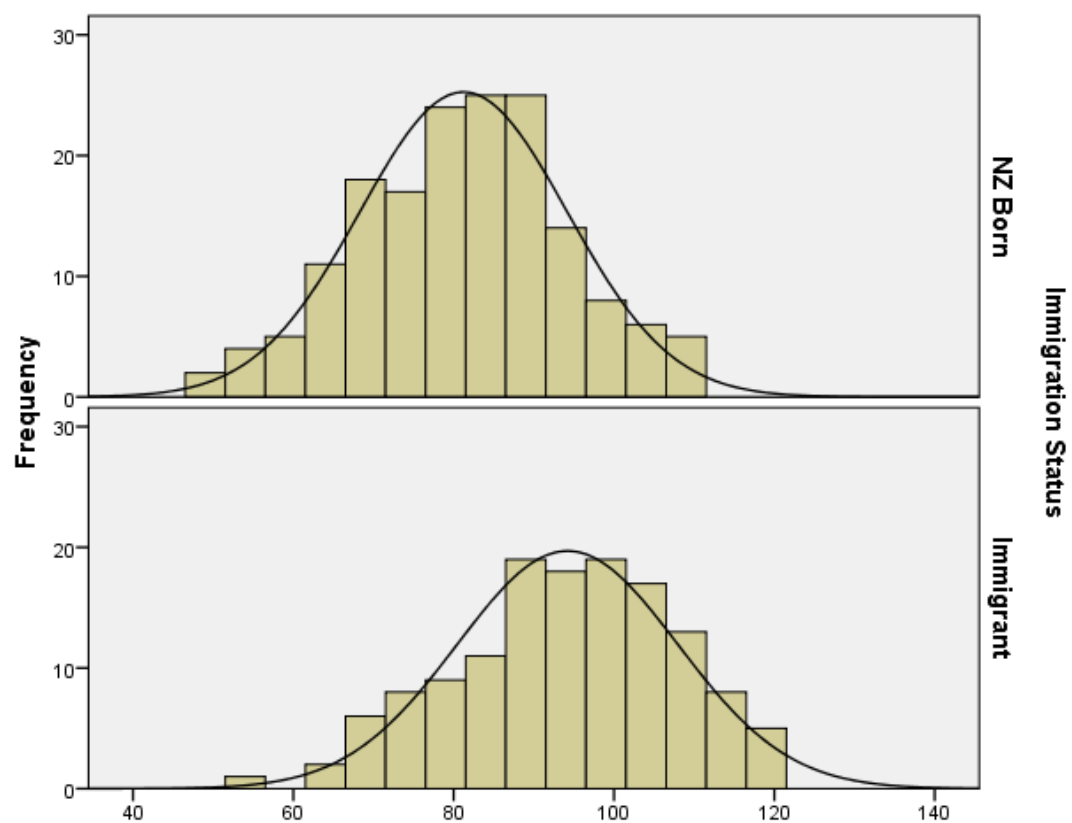
*Figure 12*  
Comparison of English L1 and Other L1 PHLBs.

Hypothesis 2: Parents' home literacy beliefs are the same, irrespective of the parents' *immigration status*.

Parents were grouped into two categories in accordance with their immigration status, NZ-born ( $n = 164$ ) and immigrant parents ( $n = 136$ ). To test the hypothesis that parents have the same/similar home-literacy views, an independent-samples  $t$ -test was performed to compare their home-literacy belief (PPLLIS) scores. Both distributions were sufficiently normal for the purposes of conducting a  $t$ -test, i.e., skew  $< |2.0|$  and kurtosis  $< |9.0|$  respectively (Schmider et al., 2010). Figure 13 shows a comparison of the distributions of NZ-born and immigrant PHLBs. The assumption of homogeneity was tested and satisfied in a Levene's  $F$  test,  $F(1, 298) = .84, p = .36$ .

The two-tailed, independent samples  $t$ -test revealed a statistically significant difference between the PPLLIS scores of NZ-born ( $M = 81.23, SD = 12.95$ ) and immigrants ( $M = 94.2, SD = 13.77$ );  $t(298) = -8.39, p < .0001$ . The magnitude of the difference in the means (mean difference =  $-12.97$ , 95% CI:  $-16.01$  to  $-9.93$ ) was large ( $d = 0.97$ ) (J. Cohen, 1992).

The hypothesis that immigrant and NZ-born PHLBs are the same was rejected. NZ-born PHLBs were on average more skills-based and traditional than those of immigrant parents, who hold on average a more emergent perspective.



*Figure 13*  
Comparison of NZ-born and immigrant PHLBs.

Hypothesis 3: Immigrant and New Zealand-born parents' home literacy beliefs are the same, irrespective of the *number of months parents have been helping* their children, when controlling for their child's age.

A two-way between-groups analysis of covariance (ANCOVA) was conducted to assess whether New Zealand and immigrant parents hold the same/similar home literacy beliefs when they have been helping their children for different timeframes, after controlling for the effect of children's age. The number of months parents have been helping their children was recoded into eight groups according to parents who have not yet helped their children and other timeframes by year to correspond with the number of months that the participants indicated. Preliminary checks were conducted to ensure that there was no violation of the assumptions of normality, linearity, homogeneity of variances, homogeneity of regression slopes and reliable measurement of the covariate. The assumption of normality was determined to be satisfied as each of the groups had distributions associated with skew and kurtosis less than |2.0| and |9.0| respectively (Schmider et al., 2010). Table 8 provides a summary of the descriptive statistics. Furthermore, the assumption of homogeneity of variance was satisfied based on Levene's  $F$  test,  $F(15, 282) = 1.13, p = .33$ .

The ANCOVA revealed significant main effects at the .05 level for immigration status,  $F(1, 281) = 19.29, p < .0001, \eta_p^2 = .06$  as well as the timeframe that parents have been helping  $F(7, 281) = 3.44, p = .001, \eta_p^2 = .08$ . The covariate, children's age, was also significantly related to PHLBs,  $F(1, 281) = 7.5, p = .007, \eta_p^2 = .03$ , but the interaction effect was not significant  $F(7, 281) = .47, p = .86, \eta_p^2 = .01$ .

Pairwise comparisons revealed statistically significant differences between immigrant

and NZ-born parents for all timeframes except the “no help” and 37-48 month categories. In the “no help” category only one NZ-born participant responded. In the 37-48 month helping category all 23 the NZ-born parents speak English L1 and six out of the seven immigrant parents also speak English L1. This may account for the convergence in the 37-48 month helping category. These comparisons are graphically represented in Figure 14.

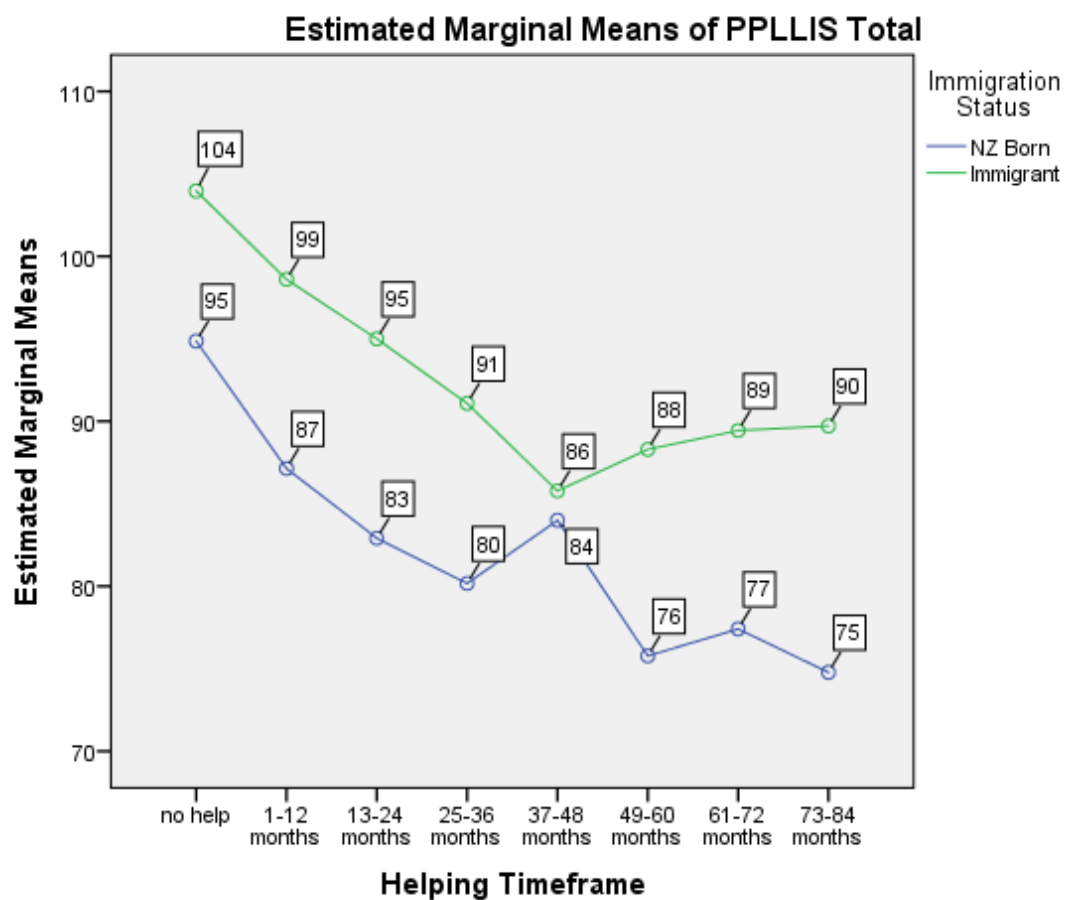
The hypothesis that NZ-born and immigrant PHLBs are the same/similar for helping their children over different timeframes and children’s age is controlled for, was rejected. NZ-born PHLBs were on average more skills-based than those of immigrant parents. Both groups of parents focused increasingly on skills, as the number of months that they have been helping their child increased, up to 37-48 months. Immigrant parents’ views then become more emergent again. By contrast, NZ-born PHLBs become increasingly more skills-based apart from the 37-48 month period. During this timeframe immigrant and NZ-born parents’ views converge.

Table 8

*Descriptive Statistics for NZ-born and Immigrant PHLBs across the Timeframes  
Helping their Children [estimated marginal means]*

	Timeframe	<i>n</i>	<i>M</i>	<i>SD</i>
NZ-Born	No help	1	96.00	—
	1-12 months	27	86.26	11.62
	13-24 months	31	82.16	12.30
	25-36 months	28	81.00	11.84
	37-48 months	23	83.70	11.87
	49-60 months	18	75.89	12.97
	61-72 months	22	78.45	16.57
	73-84 months	13	76.31	11.56
Immigrant	No help	6	99.33	14.26
	1-12 months	40	97.73	12.35
	13-24 months	37	95.30	13.97
	25-36 months	18	90.94	12.07
	37-48 months	7	86.29	10.45
	49-60 months	16	89.19	15.73
	61-72 months	7	91.14	17.00
	73-84 months	4	92.00	18.96





*Figure 14*

NZ-born and immigrant PHLBs across the different timeframes that they have been helping their children, after controlling for children's age (adjusted means).

Note: the covariate child age was evaluated at 65 months.

Hypothesis 4: Immigrant and New Zealand-born parents' home literacy beliefs are the same, irrespective of parents' *level of education*.

A two-by-three between groups analysis of variance (ANOVA) was conducted to test the hypothesis that NZ-born and immigrant parents with different levels of education have the same/similar home literacy beliefs. Participants were divided into two groups according to their immigration status (NZ-born and immigrant parents) and three groups according to their level of education (school educated, undergraduates, including participants with diplomas and post-graduates).

The assumption of normality was evaluated and determined to be satisfied as each of the groups had distributions associated with skew and kurtosis less than  $|2.0|$  and  $|9.0|$  respectively (Schmider et al., 2010). Furthermore, the assumption of homogeneity of variance was tested and satisfied based on Levene's  $F$  test,  $F(5, 292) = .67, p = .65$ . Descriptive statistics are summarised in Table 9.

The ANOVA revealed statistically significant main effects at the .05 level for both independent variables; immigration status,  $F(1, 292) = 35.33, p < .001, \eta_p^2 = .11$  (large effect) and for parents' level of education  $F(2, 292) = 5.38, p = .005, \eta_p^2 = .04$  (moderate effect). The interaction between immigration status and parents' level of education did not reach statistical significance,  $F(2, 292) = .21, p = .81, \eta_p^2 = .001$  (negligibly small effect).

Pairwise comparisons revealed that the differences between NZ-born and immigrant PHLBs were statistically significant at each of the three levels of education. Increases in levels of education corresponded with increases in the differences between the means. NZ-born PHLBs were consistently more skills-based than immigrant PHLBs.

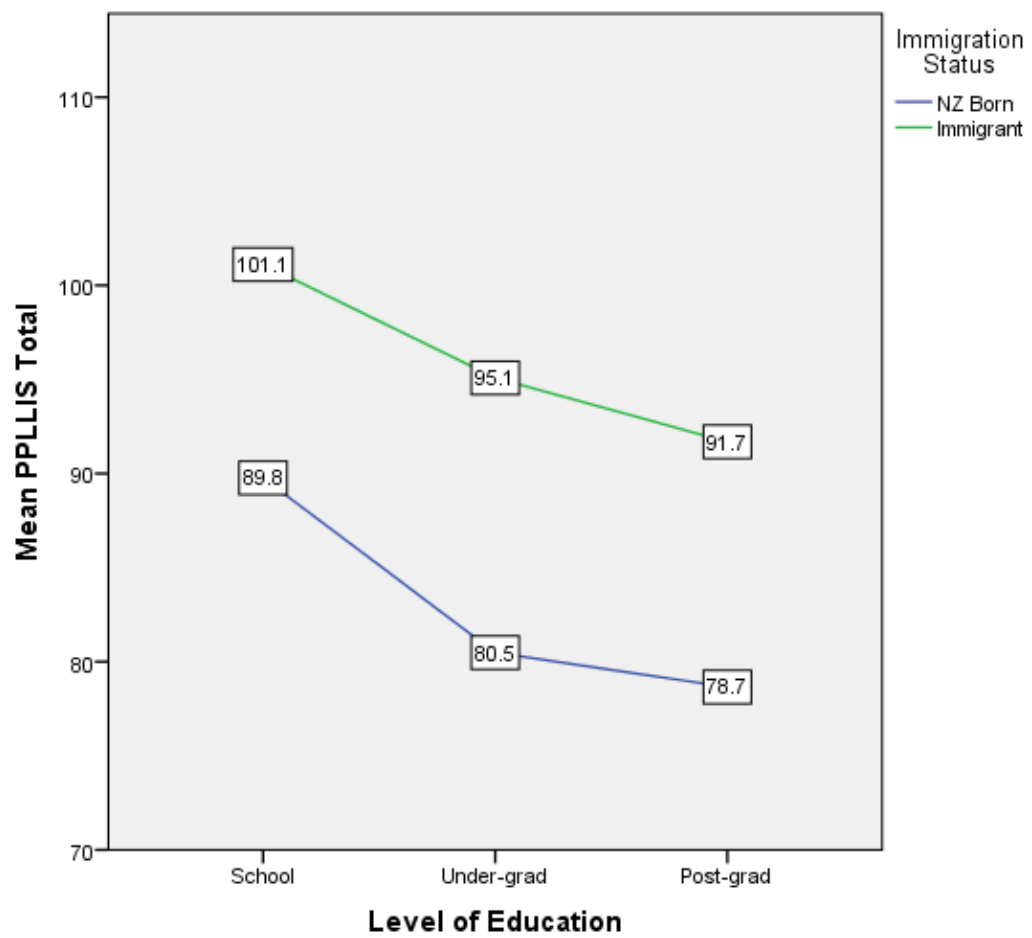
These comparisons are graphically represented in Figure 15.

Thus, the hypothesis that NZ-born and immigrant PHLBs are the same irrespective of level of education was rejected.

Table 9

*Descriptive Statistics for NZ-born and Immigrant PHLBs across Education Groups  
[estimated marginal means]*

	Level of Education	<i>n</i>	<i>M</i>	<i>SD</i>
NZ-Born	School	17	89.76	11.66
	Undergraduate	120	80.48	13.03
	Post-graduate	26	78.65	11.57
Immigrant	School	9	101.11	11.87
	Undergraduate	72	95.08	13.29
	Post-graduate	54	91.69	14.42



*Figure 15*  
NZ-born and immigrant PHLBs across the three levels of parent education (adjusted means).

Hypothesis 5: Immigrant and New Zealand-born parents' home literacy beliefs are the same, irrespective of their *child's age*.

A two-way between groups analysis of variance (ANOVA) was conducted to test the hypothesis that NZ-born and immigrant parents with children of different ages have the same/similar home literacy beliefs. Participants were divided into two groups according to their immigration status (NZ-born and immigrants) and three groups according to their children's age in months (1-36; 37-60; 61-84 months).

The assumption of normality was evaluated and determined to be satisfied as each of the groups had distributions associated with skew and kurtosis less than |2.0| and |9.0| respectively (Schmider et al., 2010). Furthermore, the assumption of homogeneity of variance was tested and satisfied based on Levene's  $F$  test,  $F(5, 294) = .52, p = .76$ .

Descriptive statistics are summarised in Table 10.

The ANOVA revealed a statistically significant main effect at the .05 level for immigration status,  $F(1, 294) = 47.24, p < .001, \eta_p^2 = .14$ , but the main effect for children's age was not significant,  $F(2, 294) = 2.65, p = .07, \eta_p^2 = .02$ . The interaction effect between immigration status and children's age also did not reach statistical significance,  $F(2, 294) = 2.80, p = .06, \eta_p^2 = .02$ .

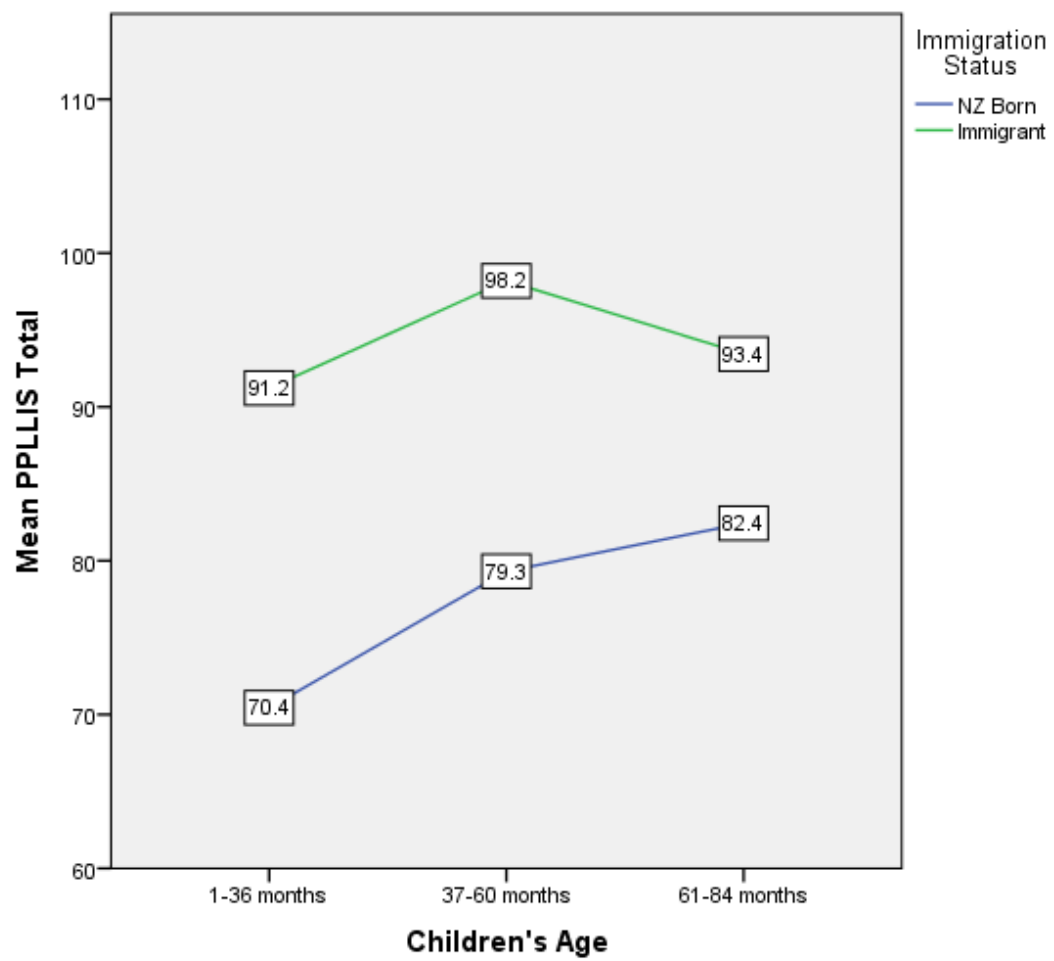
Pairwise comparisons revealed that NZ-born and immigrant PHLBs were statistically, significantly different for each of the age categories. NZ-born PHLBs were on average more skill-based than immigrant PHLBs. NZ-born parents' PHLBs became less skill-based as the children's age increased. Immigrants' PHLBs were more emergent for the 37-60 month age range, but consistent in the other age ranges. These comparisons are graphically represented in Figure 16.

Thus, the hypothesis that NZ-born and immigrant parents with children of different ages hold the same/similar home literacy beliefs was rejected.

Table 10

*Descriptive Statistics for NZ-born and Immigrant PHLBs across the Children's Age Groups [estimated marginal means]*

	Children's Age	<i>n</i>	<i>M</i>	<i>SD</i>
NZ-Born	1-36	9	70.44	9.45
	37-60	29	79.31	12.18
	61-84	126	82.44	13.00
Immigrant	1-36	9	91.22	14.68
	37-60	26	98.19	13.07
	61-84	101	93.44	13.81



*Figure 16*

NZ-born and immigrant PHLBs across the children's age categories (adjusted means).

#### **4.2.4 Research Question 4**

**Are the differences between immigrant and New Zealand-born parents' home literacy beliefs also evident when their perspectives are compared on sub-items of the questionnaire?**

A factor analysis and accompanying ANOVAs were completed to identify specific areas of the PPLLIS questionnaire and to investigate whether parents' responses remained significantly different as evidenced by the results from Research Question 3.

A multi-step procedure was followed. Horn's parallel analysis, in conjunction with eigenvalue and scree plot analysis, was first used to determine the optimum number of latent factors in the 33-item PPLLIS questionnaire. Factor analysis, using principal components extraction was then used to extract the factors (the term "factor" will henceforth be used to describe the components as the principal components analysis technique forms part of the larger factor analysis family). Lastly, two ANOVAs were conducted to confirm that the statistical significance of immigration status, remained constant when also comparing NZ-born and immigrants' PHLBs on the two reliable factors that underpin the PPLLIS questionnaire.

The purpose of the principal components analysis (PCA) was to explore and confirm the underlying groupings of the items on the PPLLIS. (J. Anderson, 1994) classified the items as related to reading, writing and general literacy and each of these items were then further characterised as either skill-based or emergent, for a total of six factors. The PCA was performed on the 33 items in the PPLLIS. Orthogonal factor rotation (varimax) was used to allow for independence in the factors. The sample was checked for suitability with the Kaiser–Meyer–Olkin measure, which confirmed that



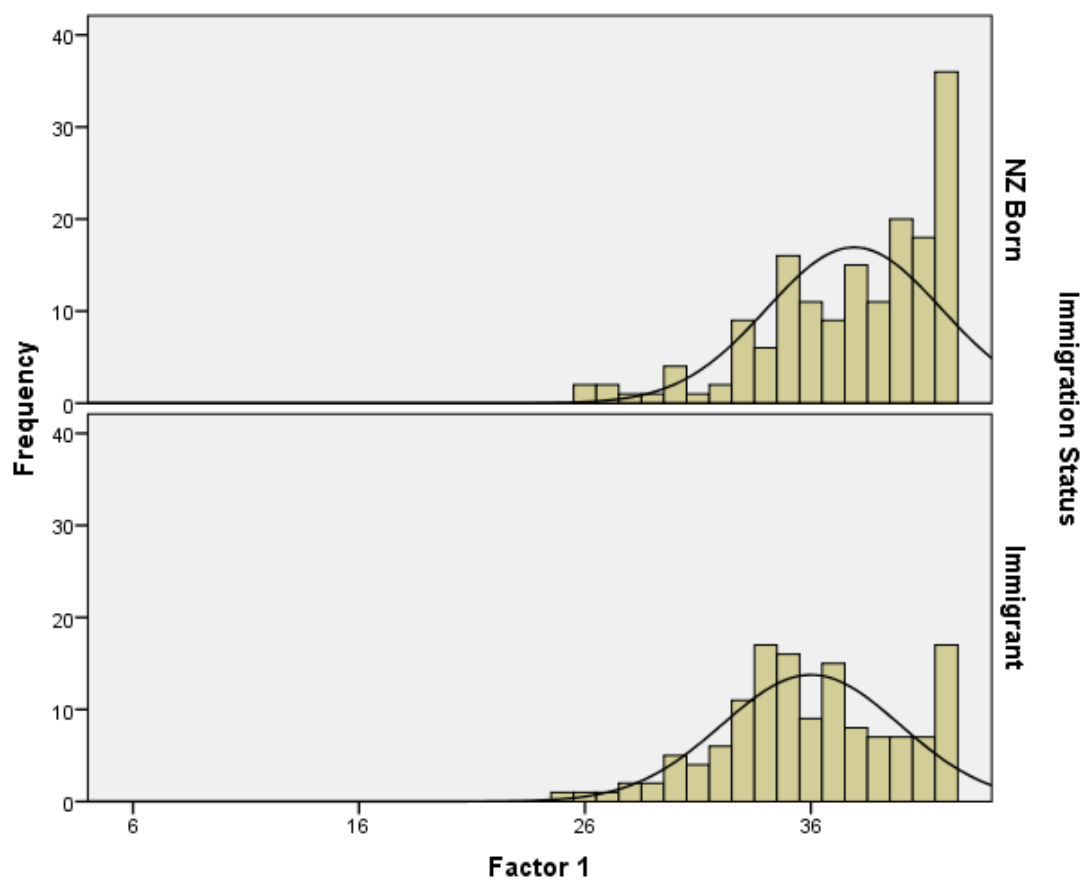
the sample was adequate for PCA ( $KMO = .86$ ) as the minimum value of 0.6 (Kaiser, 1970, 1974) was exceeded. Bartlett's test of sphericity  $\chi^2 (528) = 3051.92, p < .001$ , indicated that correlations between the items were sufficiently large for PCA. Parallel analysis was first used to determine the optimum number of factors to be extracted. This Monte Carlo simulation approach estimated the statistically significant eigenvalues and three factors were found to be statistically greater than the critical value of 1.0. An initial analysis was also done to obtain eigenvalues for each component in the data. Eight components had eigenvalues over Kaiser's criterion of 1 and in combination explained 55.7% of the variance. The scree plot (refer to Appendix G) showed an inflexion after component number 3, which supported the parallel analysis result. Six factors were selected as a compromise, based on Anderson's observation that the PPLLIS consisted of six components as mentioned above. The PCA was then run again, forcing the items into the six factors. Appendix H shows the factor loadings after rotation. Reliability analysis of the six factors was completed to measure their internal consistency. This produced two factors, both with Cronbach's  $\alpha = .82$  (items 2, 6 and 18 were deleted from Factor 2 to achieve a high alpha). Reliability of the remaining factors was below .8 and they were discarded (Cronbach's  $\alpha = .71$  and lower). The focus in this study was only on those factors with highly reliable alpha values. The items contained in the two factors with sufficient reliability corresponded well with Anderson's classification. The items contained in Factor 1 consisted of general literacy items that all belong to Anderson's emergent category (identical to Anderson's classification). Parents who agreed with these items had their responses recoded to be congruent with the overall approach of

the questionnaire, i.e. to measure congruency with an emergent literacy perspective. Factor 2 consisted of items that Anderson identified as skill-based (two were reading related and five were writing related). These two factors were used in subsequent ANOVA analyses to compare NZ-born and immigrant PHLBs. The items for each of the factors are listed in Appendix I.

#### ANOVA Factor 1:

A one-way ANOVA was conducted to confirm that the consistent differences between NZ-born and immigrant PHLBs, that were identified in the regression analysis and ANOVA comparisons, held constant when compared on Factor 1, which was labelled *Parent-as-Model* and characterised as an emergent approach.

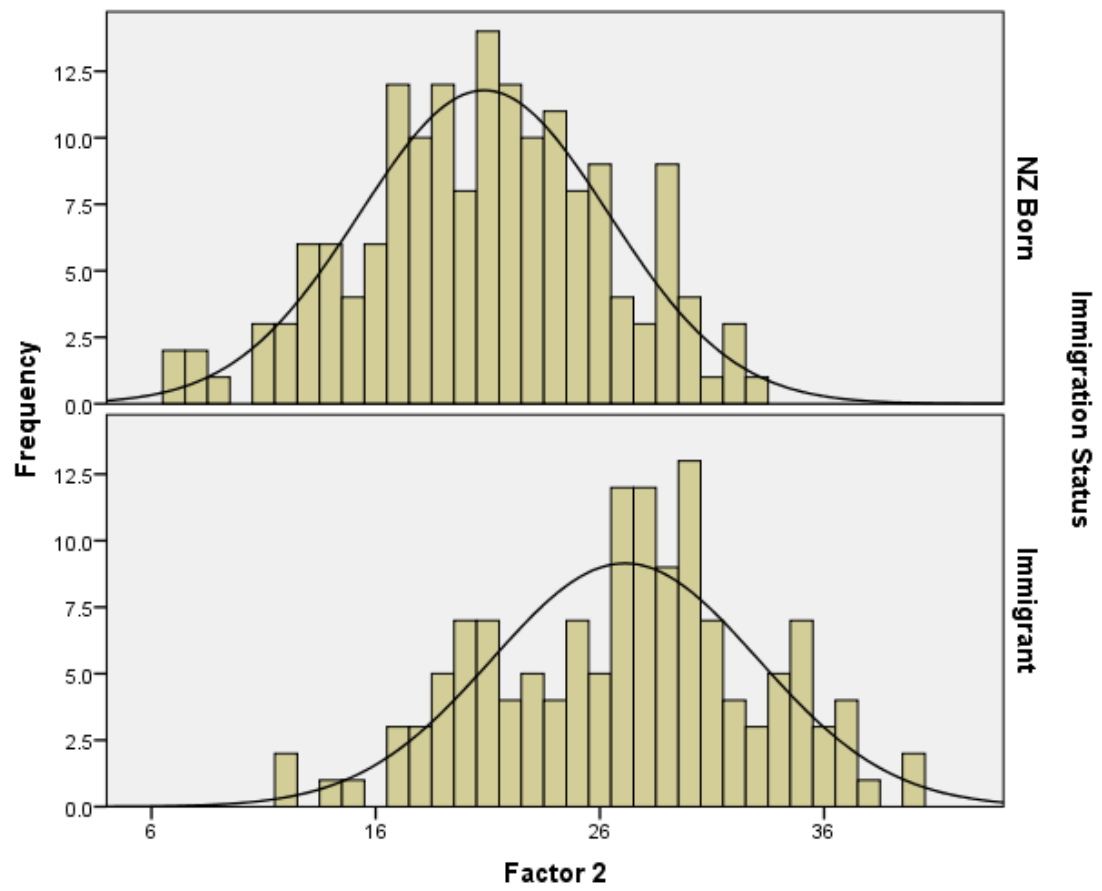
Participants' original responses were used in this analysis. Homogeneity of variance was assessed using Levene's *t*-test. Equal variance across the groups could be assumed,  $F(1, 298) = .03, p = .87$ . There was a statistically significant difference between NZ-born ( $M = 37.91, SD = 3.86$ ) and immigrants' ( $M = 36.00, SD = 3.94$ ) perspectives on *Parent-as-Model*,  $F(1, 298) = 17.82, p < .001, \eta_p^2 = .06$  (statistically significant and a moderate effect size). However, both sets of parents generally disagreed with the role of *Parent-as-Model*, thus displaying skills-based views. Figure 17 shows a graphical distribution of these PHLBs.



*Figure 17*  
Distribution of NZ-born and immigrant parents' views on Factor 1.  
(*Parent-as-Model*). Original responses without re-coding.

### ANOVA Factor 2:

A one-way ANOVA was also conducted to confirm that the differences in PHLBs identified earlier in the regression and ANOVA analyses, held constant when compared on Factor 2, which consisted of skills-based items and labelled *Parent-as-Teacher*. Homogeneity of variance was assessed using Levene's *t*-test. Equal variance across the groups could be assumed,  $F(1, 298) = .52, p = .47$ . There was a statistically significant difference between NZ-born ( $M = 20.84, SD = 5.55$ ) and immigrant parents' ( $M = 27.12, SD = 5.93$ ) views on *Parent-as-Teacher*,  $F(1, 298) = 89.47, p < .001, \eta^2 = .23$  (large effect size). Views varied considerably, but NZ-born parents generally agreed more with the items, which indicates that they hold a skills-based view. Immigrant parents generally disagreed more with assuming the role of *Parent-as-Teacher*. Figure 18 shows a graphical distribution of these PHLBs.



*Figure 18*  
Distribution of NZ-born and immigrant parents' views on Factor 2.  
(*Parent-as-Teacher*).

### 4.3 Additional Results

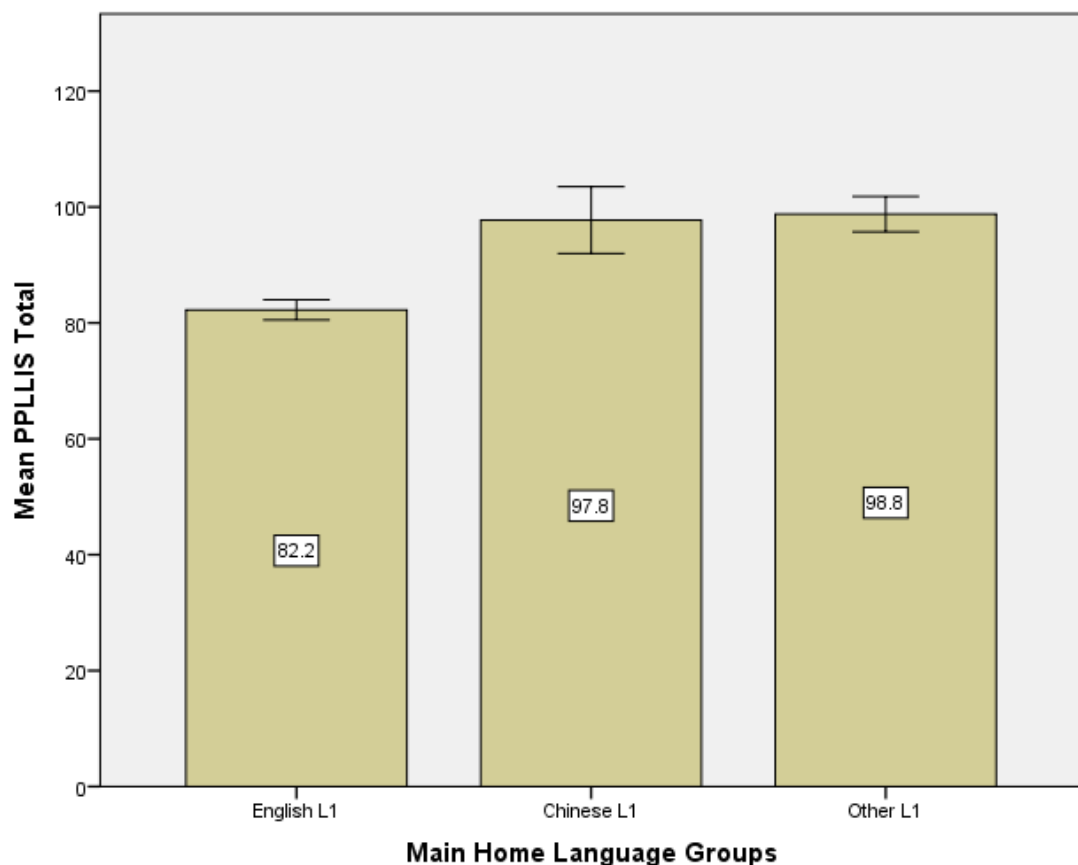
#### 4.3.1 Comparison of English-Chinese-Other Languages

The significance of main home language as a predictor of PHLBs and the statistically significant difference in the beliefs of parents, who speak English L1 and Other L1, prompted further investigation of differences between language groups. Chinese was the second largest language group after English and with its contrasting writing system it was used as a separate group along with Other L1s.

Descriptive statistics associated with the three language groups are summarised in Table 11. Participants who speak English L1 ( $M = 82.24$ ) were associated with the numerically smallest mean, which indicates strong skill-based PHLBs. Chinese L1 ( $M = 97.75$ ) and Other L1 ( $M = 98.77$ ) had PHLBs that were numerically less skill-based. A one-way between groups analysis of variance (ANOVA) was performed to compare PHLBs across the three main home language groups, English L1 ( $n = 210$ ), Chinese L1 ( $n = 28$ ) and Other L1 ( $n = 62$ ) in order to determine whether these differences were statistically significant. The assumption of normality was evaluated and determined to be satisfied as each of the groups had distributions associated with skew and kurtosis less than  $|2.0|$  and  $|9.0|$  respectively (Schmider et al., 2010). Furthermore, the assumption of homogeneity of variance was tested and satisfied based on Levene's  $F$  test,  $F(2, 297) = 1.59, p = .205$ .

There was a statistically significant difference at the  $p < .05$  level in the PPLLIS scores for the three language groups:  $F(2, 297) = 50.4, p < .001, \eta^2 = .3$ . This was a large effect size with 30% of the variance in PHLBs accounted for by language group. Fisher's LSD post-hoc tests were performed to further evaluate the nature of the

differences between the three means. The difference between English L1 PHLBs and Chinese L1 PHLBs was statistically significant,  $t(297) = -6.01, p < .001, d = -1.1$ . The difference between English L1 PHLBs and Other L1 PHLBs was statistically significant,  $t(297) = -8.92, p < .001, d = -1.33$ . Finally, the difference between Chinese L1 PHLBs and Other L1 PHLBs was not statistically significant,  $t(297) = -.35, p = .726, d = -.08$ . The effect sizes associated with the statistically significant effects are considered large, based on J. Cohen's (1992) guidelines. A visual depiction of the means and 95% confidence intervals is presented in Figure 19.



**Figure 19**  
A comparison of PHLBs for three main home language groups. Error Bars: 95% CI.

#### 4.3.2 Comparison of NZ-born and Immigrant English Families

The previous analysis, in which the language groups were compared, aligned with the characterisation of English as an “outlier language” (Ziegler et al., 2010, p. 551) with English L1 PHLBs significantly different from PHLBs for Other L1s. To confirm that this was an appropriate description of all English L1 PHLBs, NZ-born and immigrant PHLBs for English L1 were compared.

English L1 parents were grouped into two categories according to their immigration status: NZ-born English L1 ( $n = 164$ ) and Immigrant English L1 ( $n = 46$ ). An independent-samples  $t$ -test was performed to compare PPLLIS scores. Both distributions were sufficiently normal for the purposes of conducting a  $t$ -test, i.e., skew  $< |2.0|$  and kurtosis  $< |9.0|$  respectively (Schmider et al., 2010). The assumption of homogeneity was tested and satisfied in a Levene’s  $F$  test,  $F(1, 208) = 1.10, p = .30$ .

The two-tailed, independent samples  $t$ -test revealed a statistically significant difference between the PPLLIS scores of NZ-born English L1 ( $M = 81.23, SD = 12.95$ ) and immigrant English L1 ( $M = 85.87, SD = 11.53$ );  $t(208) = -2.2, p = .029$ . However, the magnitude of the difference in the means (mean difference =  $-4.64$ , 95% CI:  $-8.81$  to  $-0.48$ ) was small ( $d = -.38$ ) (J. Cohen, 1992).

#### 4.3.3 Follow-up on Variations in the Means of Factors 1 and 2

NZ-born parents held more skill-based views than immigrant parents on Factors 1 and 2, which was consistent with the overall result for PHLBs. However, there were small, but statistically significant differences in the group means for Factor 1. On Factor 2, the difference in means was very large. These variations prompted further



investigation and responses to individual items were analysed.

Factor 1 was labelled *Parent-as-Model*. The items that comprise Factor 1, are categorised as emergent in nature and by disagreeing, parents exhibit a skills-based view. Both immigrant and NZ-born parents mostly disagreed with these items as was evidenced by the skew in Figure 17, except for item 27, where almost three times more immigrants than NZ-born parents agreed that by taking children on outings helps them learn to read and write. NZ-born and immigrant parents' responses to the items in Factor 1 appear in Table 11.

Factor 2 was labelled *Parent-as-Teacher*, which was categorised as skills-oriented. There was much more variation in the responses from both NZ-born and immigrant parents as can be seen in Figure 19. This histogram shows that immigrant PHLBs are on average more emergent than those of NZ-born parents. Responses to the individual items that comprise Factor 2 appear in Table 12.

On Item 3, a large majority of NZ-born parents disagreed, which means they hold strong emergent views on this item, similar to immigrant parents. Somewhat larger differences were present on items 15 and 17. Here NZ-born PHLBs were more skill-based than immigrant PHLBs, whose views were much more mixed. On items 14 and 20, both groups held skills-based views, but NZ-born PHLBs were more skill oriented.

Table 11

*Summary of the Original Responses to the Items Comprising Factor 1*

<i>Parent-as-Model</i>		Agree %	Disagree %
Item 26 Talking to children helps them learn to read and write.	NZ	3	97
	Immigrant	5	95
Item 29 Reading to children helps them learn to read and write.	NZ	0	100
	Immigrant	1	99
Item 24 Reading to, and with children, helps them learn to write.	NZ	2	98
	Immigrant	1	99
Item 27 Taking children on outings helps them learn to read and write.	NZ	5	95
	Immigrant	13	87
Item 25 Children learn important things about reading and writing before they begin formal reading programs at preschool (kindergarten) or primary (elementary) school.	NZ	2	98
	Immigrant	7	93
Item 31 It is very important that children see their parents reading and writing.	NZ	2	98
	Immigrant	2	98
Item 28 Having children pretend to write grocery lists with you helps them learn to read and write.	NZ	0	100
	Immigrant	4	96

Table 12

*Summary of the Responses to the Items Comprising Factor 2*

<i>Parent-as-Teacher</i>		Agree %	Disagree %
Item 3 A child needs workbooks and basal readers (books with stories, pictures and questions) to learn how to read.	NZ	21	79
	Immigrant	7	93
Item 9 You need to check your child's understanding by asking him/her questions, after every story you have read.	NZ	43	57
	Immigrant	21	79
Item 17 A child needs workbooks to learn how to write.	NZ	79	21
	Immigrant	42	58
Item 15 A child should be encouraged to write only easy words and short sentences when he/she begins to write.	NZ	68	32
	Immigrant	41	59
Item 19 You SHOULD correct your child if he/she writes "kt" for the word "cat."	NZ	38	62
	Immigrant	17	83
Item 20 A child's confusion of "b" and "d" or "p" and "q" in printing indicates a major problem.	NZ	95	5
	Immigrant	83	17
Item 14 A child should practice a lot to copy words, then sentences and finally stories before trying to write on his/her own.	NZ	86	14
	Immigrant	67	33

## **CHAPTER 5**

### **DISCUSSION**

#### **5.1 Introduction**

During the 1980s and 1990s, literacy acquisition theories started to recognise the roles of parents and this prompted consideration of home literacy as social practice (McLachlan et al., 2012). Variations in families' home literacy environments were also reflected in their beliefs, activities and resources (J. Anderson, 1995a; B. M. Phillips & Lonigan, 2009). These variations have often been associated with parents' level of education and income, or as it has often been labelled, socio-economic status (McNaughton et al., 2003; Rowe et al., 2016). In countries such as Canada and the United States where immigration has led to diverse populations, factors such as cultural and language differences have increasingly been recognised as additional influences on home literacy environments (Dyson, Qi, & Wang, 2013; Li, 2011; Paratore et al., 1995). However, most of the research has been qualitative in nature and therefore based on relatively small samples. This is also the current situation in New Zealand, where a quarter of the population is foreign born and increased immigration has contributed to a diverse society (McLachlan, 2010; Statistics New Zealand, 2014). Little is known about home literacy environments and the existing research has often focused on specific age groups or been limited to ethnic minority groups (McNaughton, 1996; Zhang, 2015).

This study aimed to provide a quantitative analysis of specific aspects of the home literacy environment. It explored nine demographic factors and New Zealand parents'

home literacy beliefs (PHLBs) in respect of young children's literacy acquisition.

In the summary of the findings that follows, each research question is briefly addressed. A more detailed analysis of the significant findings follows under four separate headings in which these findings are interpreted. This chapter concludes with sections on the limitations of this study and suggestions on how future research, specifically in New Zealand, is needed to further explore the home literacy environment of parents with young children.

## **5.2 Summary of the findings**

### **Research Question 1**

Are the demographic factors education, income, parent gender and age, immigration status, home language, months helping child, child gender and age associated with PHLBs?

Parents' gender and age, immigration status, main home language and the timeframe they have been helping their children were all significantly related to PHLBs.

Education, income and children's gender and age were not significantly related to parents' home literacy beliefs. See Table 13 (section 1) for a summary of the results.

### **Research Question 2**

To what extent do education, income, parent gender and age, immigration status, home language, months helping child, child gender and age predict PHLBs?

Home language, months helping, immigration status, education and children's age were statistically significant predictors of parents' home literacy beliefs. See Table 13 (section 2) for a summary of these results.

Table 13

*Summary of the Statistical Significance of the Independent Variables*

1. Association of Predictors with PHLBs	
Significant	Non-significant
1. Home language ( $r_{pb} = .50$ )	1. Education
2. Immigration status ( $r_{pb} = .43$ )	2. Income
3. Months helping ( $r_s = -.30$ )	3. Child gender
4. Parent age ( $r_s = -.15$ )	4. Child age
5. Parent gender ( $r_{pb} = -.14$ )	
2. Predictive Capacity of Predictors of PHLBs	
Significant	Non-significant
1. Home language ( $\beta = .26$ )	1. Parent gender
2. Months helping ( $\beta = -.23$ )	2. Parent age
3. Immigration status ( $\beta = .22$ )	3. Income
4. Education ( $\beta = -.20$ )	4. Child gender
5. Child age ( $\beta = .14$ )	

### Research Question 3

Do groups present different home literacy beliefs in terms of the significant predictors?

Hypothesis 1: Parents' home literacy beliefs are the same, irrespective of the parents' *home language*.

The findings did not support this hypothesis. There was a significant difference in the home literacy beliefs of parents who speak English L1 and those who speak a language other than English as L1. PHLBs for English L1 were significantly more skill-based than for parents who speak other languages as their main home language.

Hypothesis 2: Parents' home literacy beliefs are the same, irrespective of the parents' *immigration status*.

The findings did not support this hypothesis. There was a statistically significant difference between immigrant and NZ-born parents' beliefs. Immigrant parents had a relatively more emergent perspective than NZ-born parents, who generally favoured a skill-based approach.

Hypothesis 3: Immigrant and New Zealand-born parents' home literacy beliefs are the same, irrespective of the *number of months parents have been helping* their children, when controlling for their child's age.

The findings did not support this hypothesis. Immigrant parents had a relatively, significantly more emergent perspective than NZ-born parents. NZ-born parents became more skills-based in outlook, the longer they help their children.

Hypothesis 4: Immigrant and New Zealand-born parents' home literacy beliefs are the

same, irrespective of the parents' *level of education*.

The findings did not support this hypothesis. Increased levels of education corresponded with a more skill-based approach for both immigrant and NZ born parents, but there was a significant difference between the views of immigrants, who held a relatively more emergent view and NZ-born parents who held on average a more skill-based perspective.

Hypothesis 5: Immigrant and New Zealand-born parents' home literacy beliefs are the same, irrespective of their *child's age*.

The findings did not support this hypothesis. NZ-born and immigrant parents with children of different ages had different home-literacy beliefs. Immigrant parents had views that were more relatively more emergent than NZ-born parents, whose views were more focused on the development of skills.

#### **Research Question 4**

Are the differences between immigrant and New Zealand-born parents' home literacy beliefs also evident when their perspectives are compared on sub-items of the questionnaire?

Two significant factors were identified and labelled *Parent-as-Model* (Factor 1) and *Parent-as-Teacher* (Factor 2). Parents generally disagreed with the notion that parents act as models for their children. NZ-born and immigrant parents generally had a skill-based approach with regards to Factor 1. There was a lot more variation in the overall beliefs about parents' role as teacher. Immigrant parents' views were generally more emergent and they generally disagreed with this role. NZ-born parents held a



relatively more skill-based view and were more inclined to assume the *Parent-as-Teacher* role.

### **5.3 Interpretation of the Findings**

#### **5.3.1 Pedagogical Dimensions of Parents' Home Literacy Beliefs**

This study set out to examine whether New Zealand PHLBs were congruent with a holistic, emergent perspective. PHLBs were measured on a continuum, with high scores on the PPLLIS indicating congruency with an emergent view, whilst low scores indicated a traditional, skills-based perspective. The participants achieved a mean score of 87.11, which suggests, overall, a skills-based perspective. However, with almost 205 participants' scores within one standard deviation on either side of the mean, a more accurate conclusion is that most parents have mixed views. Similar studies in which parents' pedagogical approaches to literacy in the home have also shown significant variability in PHLBs, applied to small samples (J. Anderson, 1994, 1995b) as well as large samples (B. M. Phillips & Lonigan, 2009). It is unlikely that parents have the same specialist knowledge about literacy instruction and pedagogy as teachers, but their responses suggest that they sometimes employ direct instruction strategies and at other times they focus less on skills and thus more on entertainment or an emergent approach. This coincidentally fits with Whitehurst and Lonigan's (1998) suggestion that an approach that includes code-based skills-instruction, as well as whole language is preferred, because an either-or-approach may contribute to reading difficulties. Similarly, a balanced or differentiated approach, rather than an exclusively phonics or whole-language approach, is often recommended for teachers (Arrow & Tunmer, 2012; Morrow, 2012; Tompkins, 2010).

Parents will need some level of guidance to develop a balanced view that supports their children's specific needs, but early childhood teachers in New Zealand struggle with a full and nuanced understanding of differentiated or balanced literacy instruction (McLachlan & Arrow, 2014). Some scholars have also been critical of the Te Whāriki curriculum. They have suggested that it lacks clarity in its guidelines for teachers with regards to literacy instruction (Blaiklock, 2011; Zhang, 2015). Parents who have children in preschool, kindergarten or primary school may therefore not get sufficient support and guidance from teachers to develop a strategic and balanced approach to home literacy. Since the recommendation for teachers to include more phonics and skills instruction (Ministry of Education, 1999) and much media attention to the benefits of including phonics over an exclusive whole language approach, parents' views may have been shifting from holistic to skill-based. However, there were specific emergent items that NZ-born parents strongly rejected (for example, item 3, that children need workbooks and basal readers).

Only five of the demographic variables showed a statistically significant association with PHLBs. These were parent gender, immigration status, home language and the number of months parents have been helping their child. Parent gender revealed that fathers' views are generally less skill-based than those of mothers, but the association of parent gender with PHLBs was very weak. Such an association may be related to the fact that fathers tend to spend less time with their children and focus more on entertainment activities, for example, shared storybook reading (Nichols, 2002), which is an informal activity according to the HLM (Sénéchal & LeFevre, 2002). However, this is speculative as this study does not have direct supporting evidence for

such a conclusion.

The statistical significance and strength of the relationships between immigration status and home language, and PHLBs necessitated further investigation into differences in how parents approach literacy in the home. Of the 30 lowest scores on the PPLLIS, 26 were for NZ-born parents and only four were scores for immigrants. Of the 30 highest scores, only five were for NZ-born parents, whilst 25 were immigrant scores. A *t*-test in which NZ-born and immigrant PHLBs were compared, showed a statistically, highly significant difference in the perspectives of these two groups of parents. Locally born parents' views were generally skills-based in contrast with immigrant parents whose views were generally less skills-based. Despite this difference in views between the two groups, only six out of all the participants (6%) held numerically emergent views (PPLLIS score above 115). Therefore, despite the initial interpretation of PHLBs as somewhat skills-based with a majority of parents exhibiting a mixed approach, deeper analysis revealed that NZ-born parents have stronger skills-based PHLBs whereas immigrant PHLBs were relatively more emergent, but overall, still skills-based.

These pedagogical approaches with regards to PHLBs were associated with factors such as language and culture. PHLBs can accordingly be described as situated within a family's social milieu, which will be discussed in the next section.

### **5.3.2 Social Learning Perspectives**

Technological advances in the form of neuro-imaging research along with investigations into genetic influences and cognitive child factors are contributing to our understanding of young children's literacy acquisition. However, as is evident

from the significance of the various predictors in this study, there is still a need for further research, as suggested by B. M. Phillips and Lonigan (2009), into the interactions of the various social learning perspectives that underpin in large part the theoretical framework of this thesis.

The research questions presented in this study indirectly asked how well the social learning perspectives (SLPs), as represented by the ecological predictors, fit with PHLBs. Significant social and cultural predictors of PHLBs emerged from the results: parents' main home language, their immigration status and level of education. Each of the significant predictors can be traced back to, *inter alia*, socio-cultural theory, social constructivism or social learning theory. This part of the discussion is largely theoretical, but practical considerations are addressed in the conclusion.

Main home language was the strongest of the predictors and accounted for 26% of the variance in PHLBs. Two categories were used to differentiate between parents' main home language (L1): English L1 and Other L1. All the participants who indicated English L1 (both NZ-born and immigrants) focused on the development of skills. English L1 immigrants held a slightly less skill-based view than their NZ-born counterparts, but still significantly more focused on skills development than immigrants who speak Other L1. A total of 32 different languages were recorded as the main home language and the two largest groups were English and Chinese. Appendix J provides a comparison of the mean scores for each of the languages, but it must be noted that only a small number of respondents represented the majority of these languages.

Parents' approaches to develop their children's literacy proficiency have been

investigated in previous studies. J. Anderson (1995b) and Lynch et al. (2006) used the same PPLIS measure as in this study, but they reported contrasting findings for parents in Canada. Chinese and Indian immigrants in their study typically held a skill-based perspective, whereas the Canadian born, English-speaking parents held beliefs that were on average classed as emergent. Participants in Anderson's study were middle and upper-middle class. He reported significant variation in parents' beliefs even within groups, similar to Heath (1983), despite small samples. Large variation in views also occurred in the present study, so Okagaki and Bingham's (2010) warning with regards to generalised conclusions regarding the views of all parents, has been heeded throughout.

Katz and Frost's (1992) orthographic depth hypothesis (ODH) may explain the emergent approach of immigrant parents who speak European languages (included in the Other L1 group). Languages such as Spanish and German have a shallow orthographic depth and the mapping principle is simple. Appendix I shows that the means for these languages are relatively high (PHLBs are emergent). Graphemes correspond with phonemes on an almost one-to-one basis in these languages. Parents who speak these European languages are more inclined to have emergent views, because their children learn to spell quickly upon school entry. With their children acquiring phonological and decoding skills quickly under the guidance of a teacher there is little need for parents to focus on skill-based instruction in the HLE (Georgiou, Manolitsis, Zhang, Parrila, & Nurmi, 2013; Manolitsis, Georgiou, Stephenson, & Parrila, 2009; Niklas & Schneider, 2013).

The ODH seemingly does not apply to the two most commonly used main home

languages in this study, English and Chinese, because both use opaque writing systems. It is likely though that the foundational characteristics of these two writing systems may provide a better explanation for the differences in PHLBs. English, which uses the alphabetical writing system, is phonological or sound-based. Chinese, which uses the logographic writing system, is morphological or meaning-based (Cook, 2016).

Chinese parents follow the Confucian cultural tradition even in their adoptive countries (K. Guo, 2012; Li, 2000; Liao, 2007; Ran, 2001; Yang, 2011) and we can surmise that they will rely on a similar approach to teaching their children English as in their own language and home country. An important aspect of language learning in the Confucian tradition, which is particularly relevant to this study, is the reliance on memorisation or rote learning strategies for literacy teaching/acquisition. This is especially the situation in Hong Kong where Cantonese is widely spoken. Children learn the meaning of characters as whole units with little or no reference to sounds. In mainland China, Taiwan and Singapore a phonological coding system (Pinyin) is taught to assist young children when learning to read Mandarin Chinese characters, which develop their phonemic awareness (McBride, 2016). Irrespective of whether Mandarin or Cantonese is taught, characters and combinations of characters represent words. It can be concluded that Chinese parents therefore follow a literacy teaching/learning tradition that is, at least in part, based on the characteristics of its semiography or meaning-based writing system. English on the other hand uses the alphabetic writing system, which is a phonography based on sounds (Coulmas, 2003; Perfetti & Dunlap, 2008; Perfetti, Zhang, & Berent, 1992). Children who are taught

according to the phonics system, will learn the sounds of individual letters or combinations of letters as a starting point. Learning to making meaning from larger units, such as words and sentences, forms the basis of the whole language/whole word method, which is related to the emergent perspective (Whitehurst & Lonigan, 1998). The whole word method is related to the way Chinese is taught, because the units of focus are based on meaning, whereas in the phonics method, the units of focus are sounds.

Over the last 15 to 20 years, there has been a strong push in countries where English is the main language, to include more systematic phonics instruction when teaching English. The distinction between meaning and sound-based writing systems would explain why English-speaking parents, both NZ-born and immigrants, focus relatively more on skills so that their children learn to make the connections between letters and sounds. However, it is important to note that Chinese parents as a group (all Chinese speaking participants were grouped together irrespective of their Chinese language, i.e. Taiwanese, Cantonese or Mandarin), still espouse skill-based views, but their views are relatively more emergent than English L1 PHLBs.

Immigration status was also a statistically significant predictor and accounted for 22% of the variance in PHLBs. NZ-born parents, who in the present study all speak English as their main home language, have an “advantage” over immigrant parents. This advantage, labelled “cultural capital” (Bourdieu & Passeron, 1990, p. 71) or “literate cultural capital” (Prochnow, Tunmer, & Greaney, 2015, p. 30), extends to knowledge about the local education system, as well as individuals who can provide support, resources and information. During the process of acculturation, immigrant

parents, who in this study were mostly from Europe and Asia, need time to learn the complexities of how the mainstream culture functions (Ward, 2013). Van Steensel (2006) suggested that immigrant families with school-aged children do learn about “preferred activities” (p. 378) and they believe it is necessary to engage their children in these activities despite a lack of fundamental knowledge. These “preferred activities” as practiced by the mainstream, English-speaking New Zealand culture were traditional and skill-based in nature. This difference in perspective between NZ-born parents (traditional beliefs) and immigrant parents (relatively emergent beliefs) remained a consistent trend in each comparative analysis of the five statistically significant demographic predictors.

The majority of the participants from the mainstream New Zealand culture were white, middle-class (also known as Pākehā) English-speaking mothers, who follow a Western tradition (Ritchie, 2003). Even though New Zealand society is bicultural, people from the Maori, Samoan and other Pacific Islands cultures were under-represented in this study. Immigrants from the Indian subcontinent were also under-represented, especially in the light of Hindi being the third most widely spoken language in New Zealand (Statistics New Zealand, 2014). A possible explanation could be that teachers hold a deficit view, which prevented them from forwarding the invitation to immigrant and minority parents (Rodríguez-Brown, 2011), especially those who are not fluent in English, which is often cited as an obstacle to parent involvement in their children’s education (Dyson, 2001; Ji & Koblinsky, 2009). Liao (2007) reported that Chinese parents of Year 1 primary school children in New Zealand experienced such circumstances. A Chinese translation of the questionnaire



was available and promoted in the invitation sent to parents, but no Chinese parents availed themselves of it.

Li (2011) was explicit in stating that “literacy is cultural practice” (p. 521) and this view aligns with Leseman and De Jong’s (1998) finding that immigrant parents’ “attitudes are dependent upon the country of origin and the formal education provided there” (p. 300). Such views support the finding in the present study that immigration status is significantly related to PHLBs albeit not the cause of the differences in the views of NZ-born and immigrant parents.

The third significant predictor was parents’ level of education, which explained 20% of the variance in PHLBs. Socio-economic status has been an important factor in a number of studies, either as education or, income, but often as a combination of the two. For example, Lynch et al. (2006), Stipek et al. (1992) and Spiegel, Fitzgerald, and Cunningham (1993) all concluded that parents with higher levels of education are generally less inclined to have a skills-based approach. However, J. Anderson (1995b, p. 410) disagreed with Fitzgerald et al. (1991) that “low literacy parents” prefer a skills-based approach. The current study also found that parents with low levels of school education do not necessarily hold skills-based beliefs. It is possible that the wide range of children’s ages (from 6 months up to 84 months) contributed to this difference PHLBs in the current study. Another possible factor was that the previously mentioned research mostly focused on at risk families whereas the current study attempted to be inclusive. Household income was assessed independently from parents’ education, but was not a significant predictor of PHLBs.

### **5.3.3 Temporal Dimensions of Parents' Home Literacy Beliefs**

The dynamic nature of PHLBs makes them subject to potential change over time in the same ways that cultural beliefs may change (Hinkel, 2005; McNaughton, 1995).

Three time factors (parents' and children's age and how long parents have been helping their children) were considered. The first aspect was their association with PHLBs and the second was their predictive capacity.

Parents' age showed a weak, but statistically significant association with PHLBs.

Parents who attended school during the 1970s and 1980s, when whole language was the preferred method of literacy instruction, interestingly did not show a preference for this method as expected in their PHLBs—their views were generally aligned with a skill-based approach. Increases in parents' age corresponded with increased skill-based views. It must be noted that young parents' views were, overall, still skill-based, but relatively more emergent. Parent age was not a significant predictor of PHLBs, but both children's age and the timeframes that parents have been helping their children (measured in months) were statistically, significant predictors of PHLBs.

Parents of children under the age of seven were invited to participate in order to explore latent differences between those parents who do not yet have children in school, those with children who attend preschool/kindergarten and those who have children in primary school. Any exchanges of information between teachers in these various learning environments and parents have the potential to influence PHLBs to some extent.

Only 2.3% of the respondents ( $n = 7$ ) indicated that they have not yet started helping

their child in some way to promote their English literacy skills. One of these parents had a child under the age of one. The children of the other parents who have not started helping their child, ranged from age two to age six. Of the seven parents, one was NZ-born and their PHLBs were generally emergent, when compared with the overall mean of 87.11. Some of these parents indicated that their children were still too young for literacy events or “We are taking it easy”. Immigrant PHLBs were on average, more emergent than NZ-born PHLBs for the various timeframes. Figure 14 (in Chapter 4) shows a distinct change in PHLBs for both groups after approximately 36 months of helping their child. For this timeframe, there is statistically no difference between the groups’ PHLBs. This is likely due to the fact that six of the seven immigrant respondents in that particular timeframe, were English L1, compared to the 23 English L1 NZ-born participants. The majority of parents indicated that they start to help their child from approximately 12 months of age. For shorter periods of helping their child, immigrant and NZ-born parents both displayed relatively more emergent PHLBs that became increasingly more skill-based over time, but after the convergence at 36 months, the trend for immigrant PHLBs reversed, whereas NZ-born PHLBs continued to become more skill-based.

PHLBs with regards to children in the different age groups for immigrant and NZ-born parents were also significantly different from each other. Parents of children under the age of three held skill-based views. Immigrant PHLBs were on average less skill-based than those of NZ-born parents. The number of respondents in this age group was relatively small, but this finding was unexpected. Parents with very young children were expected to prefer informal activities such as picture-book reading and

singing songs, which emphasise fun and entertainment. Children, who are younger than three, were regarded as too young for direct skills instruction because they lack adequate language skills. However, this argument was disconfirmed because the results for both groups were skill-oriented.

Immigrant and NZ-born parents of children over the age of three, in the 37-60 month age group, displayed views that were less skill-based than parents with younger children. This is when children start attending preschool and early childhood centres in New Zealand (Arrow & McLachlan, 2014; Hamer & Adams, 2003). Parents focus less on skills, which may be attributed to the influence of early childhood teachers who are guided by Te Whāriki, which is constructivist in nature. Such a view is supported by Prochnow et al.'s (2015) explanation that despite 92% of NZ children receiving some level of early childhood education, they lack early literacy skills. For parents with children over the age of five, immigrant PHLBs became skill-based, similar to immigrant PHLBs for the youngest age group.

The passing of time was related to PHLBs, whether in the form of parents' age, children's age or the timeframe that parents have been helping their children. This provides support for Bronfenbrenner's (1986) incorporation of the chronosystem into his ecological systems theory. Ongoing changes in the New Zealand education system, including suggestions to include more phonics-based instruction, may have influenced these findings. However, for different explanations of these potential changes over time to be evaluated, it would be useful to conduct a longitudinal study to assess the potential effects of changes in children's age on PHLBs. This may be particularly relevant in the three different age categories used in this study and will

shed light on how parents view their children's literacy development over time.

#### **5.3.4 Complexity and Variations in Parents' Home Literacy Beliefs**

The rationale for the inclusion of Research Question 4, was to confirm that the views of parents on sub-sections of the PPLIS questionnaire were consistent with PHLBs overall. Parents' overall views were generally more traditional and skill-based due to the strong influence of the homogenous views of the large number of English L1, NZ-born participants. Lynch et al. (2006) reported an emergent approach from parents in their studies, but significant variation in PHLBs has been reported by J. Anderson (1995b) and B. M. Phillips and Lonigan (2009). In the present study there was also significant variation in PHLBs, despite the general perspective being skill-based. Two factors were extracted in a factor analysis and they were compared to parents' overall beliefs in an attempt to confirm consistency and to identify any specific differences. Further analyses were done at the item level.

Factor 1 was labelled *Parent-as-Model* and parents who agreed with the items in this factor, held relatively emergent views, whilst parents who disagreed with them, held more skill orientated beliefs. Parents' immigration status was used to check for any specific group differences on Factor 1. Responses indicated strong skill-based views for both NZ-born and immigrant parents. Parents generally disagreed with Factor 1's emergent approach, which suggests that modelling behaviours such as talking to children, reading to them, taking them on outings and acting as a role model, all may help children to learn how to read and write. This analysis corresponded with the overall traditional approach of NZ-born PHLBs, but it was even more pronounced. Immigrant PHLBs were generally more skill-based in terms of Factor 1, when

compared to their overall PHLBs.

An item analysis for Factor 1 showed similar views held by both groups on six of the seven items. The main difference in the participants' views occurred on item 27 (*Taking children on outings helps them learn to read and write*). Almost three times more immigrants than NZ-born parents agreed with the emergent view that taking children on outings, helps them learn how to read and write. A summary of NZ-born and immigrant parents' responses to all seven questions was presented in Table 13.

Factor 2 was labelled *Parent-as-Teacher* and the distributions of parents' responses were normal, but similar to PHLBs overall, there was large variation present.

Comparative histograms in Figure 19 (in Chapter 4) show that NZ-born PHLBs generally supported such a role, which aligned with their overall skill-based PHLBs.

Immigrant PHLBs in general did not support the role of *Parent-as-Teacher*. This corresponded with immigrants' relatively less skill-based (more emergent) approach.

More differences at the item level emerged from this comparison than on Factor 1, which was expected due to the large variation in responses evident in the histograms.

In respect of item 15 (*A child should be encouraged to write only easy words and short sentences when he/she begins to write*) and item 17 (*A child needs workbooks to learn how to write*), the group responses stood in very strong contrast. For example, 80% of NZ-born parents agreed with the skill-based view that children need workbooks to learn to write. The majority of immigrant parents (58%) disagreed and held an emergent view, yet a large proportion (42%) agreed. Curiously, both groups held an emergent view on item 3 (*A child needs workbooks and basal readers (books with stories, pictures and questions) to learn how to read*), disagreeing with the

notion that children need workbooks to learn to read. This suggests that PHLBs for the groups with regards to writing are slightly more aligned at an item level and in favour of a skill-based approach than in the case of reading. A summary of NZ-born and immigrant parents' responses to Factor 2 appears in Table 14.

The comparison of the two factors with overall PHLBs suggests that there were some inconsistencies, because both NZ-born and immigrant parents emphatically rejected a *Parent-as-Model* approach. However, significantly more variation in parents' views occurred with regards to the *Parent-as-Teacher* role, including some large differences in views at the item level. NZ-born parents mostly supported traditional, direct involvement and teaching strategies in the HLE, whereas immigrant PHLBs were sometimes in favour of a more hands-off approach and often showed preference for a mixed approach.

B. M. Phillips and Lonigan (2009) levelled some criticisms against dichotomised approaches to parents' beliefs and activities. They argued that PHLBs and activities are more complex than "mutually exclusive choices or as opposite ends of a single continuum (p. 150). The approach in the present study did place PHLBs on a continuum, but used a 6-point Likert scale in an attempt to provide sufficient depth to understanding parents' responses. It was clear that very few participants exclusively held either a skill-based or emergent view. Parents' views were mostly mixed, as indicated by the normal distribution of PHLB scores and the variations revealed by the item analysis. However, interviewing parents, an approach followed by J. Anderson (1994), to follow up on their responses to the questionnaire or even as the main data collection method, may provide deeper insight into parents' views with the

opportunity to follow up on questions that may arise from responses. B. M. Phillips and Lonigan (2009) viewed “variable-centred” rather than “person centred” studies, as limiting and a “shortcoming” (p. 151). This is perhaps a valid general argument, but the purpose of the present study was indeed to specifically evaluate variables in the New Zealand context where quantitative data are still lacking.

#### **5.4 Limitations and Directions for Future Research**

Some of the limitations in the findings from the present study lend themselves to various future investigations. Three main areas for further investigation have been identified. Two stem from the limitations of the study, whilst the third is related to the finding that the parents’ approach to their children’s literacy acquisition, may, to some degree, be dependent on the parent’s role or the task at hand.

Implications arise from the use of an online, self-report questionnaire; and the recruitment strategies, and sampling techniques, which were necessary for the web-based survey implemented in the study. Primary school principals and ECE centre directors/managers were primarily contacted to assist with the distribution of invitations to potential participants, but the sample included more school-going children over the age of five than children under the age of five; therefore, further research focused on under-fives would be useful. The participants were also not a cross-section of the population, and there is a need to further explore the views of certain ethnic and language minorities, especially in the light of indications by McNaughton (2001), Cullen (2002) and Tunmer et al. (2013) that children from Māori, Pacific Island and low SES families are the ones who often struggle with literacy in New Zealand. These, as well as Hindi speaking families, are also the



families that have been under-represented in the present study. A small number of participants were fathers. There have been efforts to involve fathers more in their children's education and further work is necessary to better understand the home literacy beliefs of fathers.

Moreover, families without access to the internet, likely to be low SES families, would have been unable to participate in this web-based survey. However, previous research has indicated that low SES (income and education) families often exhibit PHLBs that are skill-based (Baker, 1995; Lynch, 2006, Stipek, 1992). If this were the same in New Zealand, including data for low SES families would perhaps strengthen the current finding that NZ-born parents' views are significantly skill-based; though it would also be interesting to determine how such families fit within the *Parent-as-Model* versus *Parent-as-Teacher* factors derived from the current data. Therefore, despite the limitations associated with an online survey technique, the findings should inform future research, which may focus specifically on the PHLBs of low SES families.

A second area to explore further is the relationship between PHLBs, parental literacy-related activities with their children, and the children's literacy outcomes in the New Zealand context. With English L1 parents in this study presenting surprisingly strong skill-based views, it would appear that, in terms of the HLM (Sénéchal & LeFevre, 2002), they engage their children in formal literacy activities. It is possible that skill-based home literacy environments and holistic, constructivist approaches in the early years, inadvertently combine to engender positive literacy outcomes. Further, instead of demographic variables being the primary driving forces behind PHLBs, and thus

parents' activities, it may be their judgement of their children's literacy outcomes that determine their home literacy beliefs to a greater extent (B. M. Phillips & Lonigan, 2009). Parents who believe that their children are struggling with reading and writing may therefore exhibit stronger skill-based views. Without data on child outcomes this remains unanswered. Studying a small sample of two groups of parents, one that exhibits strong, skill-based perspectives versus a second with more holistic views, and assessing their children's literacy outcomes may explain this relationship better. A small sample will also be conducive to conducting interviews to further explore PHLBs in-depth and thus providing a qualitative focus on the "person" and not simply the "variables", as mentioned above.

A third area for future consideration is related to the structure of the questionnaire and the findings from the factor analysis. Factor analysis revealed two reliable factors, which were the focus of analyses reported in this study. However, a third factor was identified which had a Cronbach reliability value of .71 and was considered borderline in terms of evidence for its reliability. This third factor was related to developmental aspects of literacy learning and was comprised of items that J. Anderson (1994) classified as general literacy items, but many of the items were related to factors associated with the abilities/development of the child (e.g., *'Children have to be a certain age before they can begin to learn to read and write'* and *'Only gifted children learn to read and write before receiving formal instruction in preschool (kindergarten) or primary (elementary) school'*). As discussed in the previous paragraph, the child's literacy abilities, or parental perceptions of these abilities, is a further area that should be investigated to explain influences on home

literacy practices – and such parental perceptions are likely to be influenced by past experience and cultural expectations, which may again show differences between NZ-born and immigrant families. Therefore, increasing the reliability of this third factor may be useful so as to be able to contrast with the other factors in the questionnaire and factors identified in the current study. For example, limited variation in responses to the *Parent-as-Model* factor occurred, but large variations between NZ-born and immigrant responses were identified for the *Parent-as-Teacher* factor. This latter effect may be better understood by assessing parental views on children's skills levels and/or development: i.e., those with the view that teaching is only appropriate following a certain level of skills development in their child would be unlikely to score high on the *Parent-as-Teacher* until that level of skills development has been reached, potentially leading to a three-way interaction between parental views on development, their child's skill/development level, and variations in home literacy practices. Another surprising difference was between immigrant and NZ-born views with regards to the use of workbooks and basal readers in reading and writing instruction. It is necessary to follow up on these variations in future research to establish whether they are due to actual PHLBs or the format of the questionnaire: for example, it is possible that variation may be related to different perspectives on reading, writing and general literacy components of the questionnaire, which may vary in terms of emergent versus skill-based beliefs. Such future research would confirm the complexity of PHLBs identified in the literature, and in the present study, but should help increase our understanding of this complexity.

## **5.5 Conclusion**

This study found that the parents of young children in New Zealand, have English home literacy beliefs that can, on average, be characterised as skill-based rather emergent. Various significant ecological predictors of PHLBs were identified, namely a participant's main home language, the timeframe that a participant has been helping their child to promote literacy ability, the participant's immigration status, level of education and the child's age.

Immigration status revealed that parents who were born in New Zealand were more inclined to assume the role of teacher, whereas immigrant parents were more inclined to prefer a relatively more emergent approach. A plethora of terms has been used as alternatives, for example, an emergent approach has also been described as constructivist, an entertainment perspective or a whole language approach. A skill-based perspective has also been described as formal, didactic or phonics based. This study confirmed previous findings that PHLBs are varied and that a dichotomous characterisation of PHLBs can be misleading. The majority of the participants' views were mixed, which requires a theoretical approach that can better distinguish between their perspectives.

Main home language also predicted PHLBs. Parents who speak English L1 held skill-based views. It was significant though, that this included English L1 immigrant parents. Speakers of Other L1 languages and Chinese-speaking parents generally held views that are characterised as relatively more emergent. An "entertainment" approach has been used as an alternative description of their approach, but when the logographic writing system of the Chinese language and the rote learning strategies

they employ to learn to read and write are taken into account, it would appear that a “whole language” approach may be more useful when categorising or describing their approach.

Parents’ level of education was also a statistically significant predictor of PHLBs.

However, parents with higher levels of education held beliefs that were more skill-based. This finding applied to both NZ-born and immigrant parents. With much previous research published on education, income and SES, it was interesting that in this study income showed no relationship with PHLBs.

Children’s age and the number of months that parents have been helping their child to promote their English proficiency were both statistically significant predictors of PHLBs. However, uncertainty remains about the nature of their association with PHLBs, because causality cannot be inferred. It is possible that the parents’ skill-based views that were evident were caused by their children struggling with aspects of literacy acquisition.

The investigation into sub-sections of the questionnaire revealed that extreme caution must be exercised when generalisations are made. For example, parents’ views in respect of a role such as *Parent-as-Model*, which can be characterised as emergent or holistic, was rejected by both NZ-born and immigrant parents. Such a perspective contradicted immigrant parents’ overall view which was relatively emergent, as well as NZ-born parents’ overall perspective which was skill-based, but to a lesser extent. Analysis of the *Parent-as-Teacher* role revealed that there were inconsistencies at the item level in a comparison with parents’ overall views. Moreover, there were limited differences between parents’ views on reading and writing.

Practical considerations may be divided into different categories depending on the audience: third parties such as policymakers, or designers of family literacy programmes, which are often designed to assist parents with home literacy, teachers and also parents.

Designing family literacy programmes that often aim to support immigrant parents with knowledge about their children's English literacy development, is often costly and time consuming. J. Anderson et al. (2010) pointed out that family literacy programmes have been criticised in the past. However, despite the criticism, participants in family literacy programmes themselves report benefits that stem from their involvement (J. Anderson, Anderson, & Gear, 2015).

The current research confirmed that established factors such as culture and language function as reliable and strong predictors of PHLBs. It may be possible though to enhance the effectiveness of family literacy programmes if designers and presenters of such programmes take into account that additional factors may contribute to the home literacy environment. As an example, the effect that time has on parents' beliefs, should be considered. Families who participate in these programmes may need different types, or even different amounts of information at different stages of their children's development. Younger parents may have different views when compared to older parents. It is also likely that recent immigrants who lack cultural capital may have different needs in comparison to families who have already been exposed to the education system via the media, or family and friends.

It has been reported that immigrants and parents from minority cultures may have different views with regards to literacy acquisition than those held by their child's

teacher, school or the mainstream culture. Discontinuity between teachers' and parents' home literacy beliefs has the potential to harm the development of children's literacy skills. Biddulph (2013) pointed out that "uninformed parental help with reading at home" is related to literacy underachievement in New Zealand (p. 6).

Teachers must keep in mind that not all parents view or approach home literacy in the same way. This study confirmed that there may be much variation in parents' beliefs. Open, honest communication between teachers and parents is needed, particularly if they have different beliefs and expectations, to bridge this gap. When teachers and parents work together instead of against each other, respectful collaboration can only benefit the child's literacy acquisition and skills development. For example, it might be helpful if schools could consider having a translator present to assist teachers when they explain classroom practices to parents who do not speak English as their home language. This will not only facilitate two-way communication, but it will also demonstrate that the family's home literacy beliefs are valued if the teacher can enquire about parents' beliefs and practices. Teachers and facilitators may consider the predictors from this study to guide their interactions with parents. Deeper knowledge and insight into parents' views and expectations will help with the design of appropriately differentiated materials to support parents, rather than general instructions such as "read to your child every day".

Parents may need or require different levels or types of support from teachers, especially when the New Zealand education system itself is in a state of flux.

Differentiated information will help parents to make decisions about the activities they want to engage in and to set goals. For example, all NZ-born parents in this study

held a relatively strong skill-based perspective and disagreed with the notion that reading to children helps them learn to read and write (item 29). Some of these parents may need guidance, not only on how to include more activities that focus on entertainment such as shared book reading, but also on how to conduct dialogic reading. In terms of the home literacy model, such an approach will help to extend their children's range of vocabulary and reading comprehension. Chinese L1 parents, in contrast, may need different levels of support with the inclusion of activities that promote phonological awareness. Mandarin speaking parents from mainland China, for example, are familiar with Pinyin, which is a phonological coding system for Chinese that promotes phonological awareness and a skill that transfers to English. However, Cantonese speaking parents from Hong Kong who are not exposed to Pinyin have poor phonemic awareness and will need more support with teaching the sounds in English to their children.

It would be tempting to generalise the findings in this study to large groups, but the evidence is that there may be significant variation in PHLBs, even within a group. A cautious approach is therefore recommended in which the specific area of literacy acquisition and the group that it applies to, are considered.



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## APPENDIX A: ETHICS APPROVAL



### HUMAN ETHICS COMMITTEE

Secretary, Lynda Griffioen  
Email: [human-ethics@canterbury.ac.nz](mailto:human-ethics@canterbury.ac.nz)

Ref: 2014/52/ERHEC

29 January 2015

Frederik du Toit  
School of Teacher Education  
UNIVERSITY OF CANTERBURY

Dear Erik

Thank you for your request for an amendment to your research proposal "The effect of Chinese immigrant parents' cultural intelligence on their children's reading acquisition in New Zealand primary schools" as outlined in your email dated 20 January 2015. I am pleased to advise that this request has been considered and approved by the Educational Research Human Ethics Committee.

Please note that should circumstances relevant to this current application change you are required to reapply for ethical approval.

If you have any questions regarding this approval, please advise.

We wish you well for your continuing research.

Yours sincerely

A handwritten signature in black ink, appearing to read 'N Surtees'.


Nicola Surtees  
**Chair**  
**Educational Research Human Ethics Committee**

*"Please note that Ethical Approval and/or Clearance relates only to the ethical elements of the relationship between the researcher, research participants and other stakeholders. The granting of approval or clearance by the Ethical Clearance Committee should not be interpreted as comment on the methodology, legality, value or any other matters relating to this research."*

F E S

## APPENDIX B: PERMISSION TO USE PPLLIS

sign out | Erik du Toit

 Find Someone Options ?

RE: Permission to use PPLLIS

Anderson, Jim [jim.anderson@ubc.ca]

To: Erik du Toit

Thursday, 22 January 2015 09:42

You replied on 22/01/2015 10:08.

Hi Erik,

I am pleased that you are interested in the PPLIS and I am delighted to give permission to use it.

I ask that you cite it as follows:

Anderson, J. (1995). Listening to parents' voices: Cross cultural perceptions of learning to read and to write. *Reading Horizons*, 35, 394-413.

I'd also appreciate hearing the results of your study and if you post your dissertation in a repository, perhaps you could send me the link.

Very best wishes,  
Jim Anderson

**From:** Erik du Toit [mailto:erik.dutoit@pg.canterbury.ac.nz]  
**Sent:** Wednesday, January 21, 2015 12:24 PM  
**To:** Anderson, Jim  
**Subject:** Permission to use PPLLIS

Dear professor Anderson,

I am a PhD student at the University of Canterbury (Christchurch, NZ) and want to request permission to use the PPLLIS survey as published by Lynch et al (2006), in my own research. I have modified the survey to include some questions by Hood, Conlon & Andrews (2008).

Thank you in advance.

Kind regards,  
Erik du Toit

This email may be confidential and subject to legal privilege, it may not reflect the views of the University of Canterbury, and it is not guaranteed to be virus free. If you are not an intended recipient, please notify the sender immediately and erase all copies of the message and any attachments.

Please refer to <http://www.canterbury.ac.nz/emaildisclaimer> for more information.

## APPENDIX C: QUESTIONNAIRE

### WELCOME

#### Parents' Home Literacy Beliefs and Practices for Young Readers

*Please read the following information before you access the questionnaire.*

You are invited to participate in the research project *Parents' Home Literacy Beliefs and Practices for Young Readers* by completing the following questionnaire. The aim of the project is to find out more about your thoughts on **English** home literacy and the activities you do to develop your child's reading and writing skills. If you also teach your child another language, please refer to your beliefs and activities focused on promoting English skills. Your child must be **under 7 years of age**.

**The parent who spends the most time helping your child with English reading and writing activities at home, should complete the questionnaire. Either parent may complete the questionnaire if you spend equal amounts of time on activities.**

This research project is being carried out for doctoral studies by Erik du Toit ([erik.dutoit@pg.canterbury.ac.nz](mailto:erik.dutoit@pg.canterbury.ac.nz)) under the supervision of professor John Everatt ([john.everatt@canterbury.ac.nz](mailto:john.everatt@canterbury.ac.nz)). We will be pleased to discuss any concerns you may have about participation in the project.

Participation is voluntary. You may withdraw from the study at any time without penalty.

All personal information and answers to the questions will remain strictly confidential. Your personal details and answers are important for the study so you will be reminded if you inadvertently are about to skip a question, but you may leave any answer blank or select the "prefer not to answer" option, if you feel uncomfortable with the question.

It takes participants approximately 15-25 minutes to complete the questionnaire. You are able to save your answers if you cannot complete the questionnaire in one sitting and continue later.

All participants will receive a summary report at the end of the study. Home literacy hints/tips will be included. All participants will be entered into a draw for one of 5 x \$50 gift vouchers. You have the option of completing the questionnaire anonymously, but if you complete the questionnaire anonymously then you will not receive the report nor entry into the draw for the gift voucher, because I will not know how to contact you.

This research study has ethical approval from The University of Canterbury's Educational Research Human Ethics Committee. If you have a complaint about the study, you may contact The Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch or email: [human-ethics@canterbury.ac.nz](mailto:human-ethics@canterbury.ac.nz).

**By clicking the "next" button below and entering the questionnaire, it will be understood that you have read the above information and consented to participate in the project, and that you consent to publication of the results of the project with the understanding that anonymity will be preserved.**

Thank you very much for your support.

Kind regards,  
Erik du Toit

### DEMOGRAPHICS

The following questions are about you and your family.

Parent's gender

- ☐ Male  
☐ Female

What year were you born?

Parent's nationality

- ☐ New Zealander  
☐ Other (please specify)

Ethnicity

Are you a New Zealand immigrant?

- ☐ No  
☐ Yes

How long have you been living in New Zealand? Please estimate how many **years** in total.

- ☐ If under a year, how many months?

- ☐ Years in NZ

How long has **your child** been living in New Zealand? Please estimate how many **months** in total and drag the slider.



What is your main home language?

- ☐ English  
☐ Other (please specify)

What language(s), other than your main language, can you speak (able to have a basic conversation if you do not speak it fluently)?

☐ None (only speak English)

☐ Other (please specify)

Parent's highest education (education you have completed)

☐ Elementary school

☐ High school

☐ College, Institute of Technology or Polytechnic (diploma)

☐ University degree (3 or 4-year degree, including honours degrees)

☐ Post-graduate degree (master's or doctorate degree)

☐ Prefer not to answer

Total annual household income in New Zealand

☐ \$0

☐ \$1 - \$24,999

☐ \$25,000 - \$49,999

☐ \$50,000 - \$74,999

☐ \$75,000 - \$99,999

☐ \$100,000 - \$124,999

☐ \$125,000 - \$149,999

☐ \$150,000 - \$174,999

☐ \$175,000 - \$199,999

☐ \$200,000 - \$224,999

☐ \$225,000 - \$249,999

☐ \$250,000 - \$274,999

☐ \$275,000 - \$299,999

☐ \$300,000 or more

☐ Prefer not to answer

**For the questions that follow:**

**If you have more than one child under the age of 7, focus on the child you have spent the most time with, doing reading and writing activities.**

**If you also have older children, focus on the child who is still under 7 years of age.**

Child's gender

☐ Male

☐ Female

Child's date of birth. Please use this format (DD/MM/YYYY).

What is the main language that your child speaks at home?

- ☐ English only
- ☐ Mostly English and another language (please specify)
- ☐ Mostly another language and some English (please specify)
- ☐ Too young and does not speak yet

How long have you been helping your child at home with English reading and writing activities (exclude homework from school)? Please estimate **how many months in total** and drag the sliding bar.



Does your child have older siblings?

- ☐ Yes
- ☐ No

Does your child have younger siblings?

- ☐ Yes
- ☐ No

#### HOME LITERACY BELIEFS

Select one answer for each of the following 33 questions.

A child learns to read by first learning the letters of the alphabet and their sounds, then words, then sentences and then stories.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Teaching a child to recognize isolated words on sight is a suitable technique for teaching him/her to read.

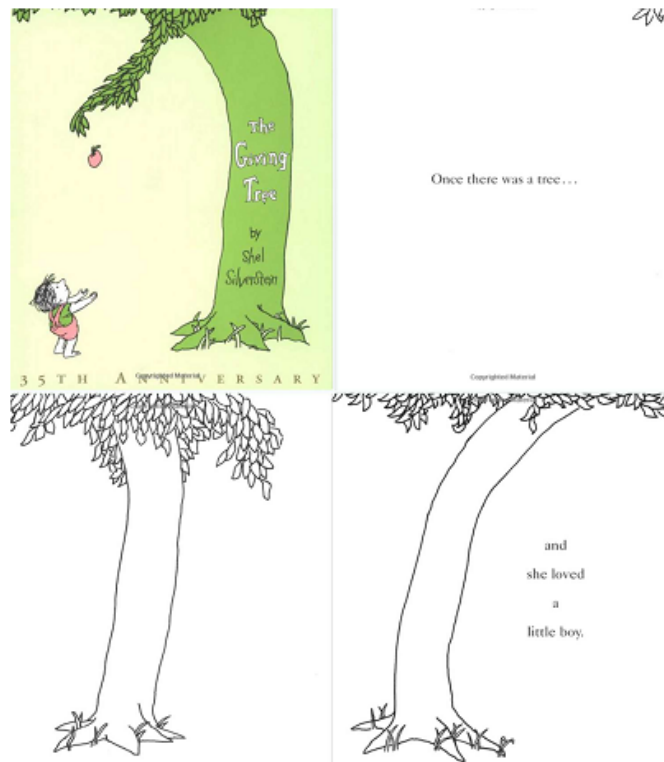
- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

A child needs workbooks and basal readers (books with stories, pictures and questions) to learn how to read.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree



This book, *The Giving Tree*, is suitable to read to very young (e.g., 3-, 4- and 5-year old) children.



- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

A child benefits from hearing favourite stories that he/she has memorized, read to them again and again.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

You should not encourage your child to join in while you are reading a book which he/she knows; it is better that the child listens to the story without interruption.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

You will be teaching your child a bad habit if you point to the print while you are reading.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

You are helping your child learn to read by encouraging him/her to talk about what is being read.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

You need to check your child's understanding by asking him/her questions, after every story you have read.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

You should allow your child to "read" familiar books by retelling the story from memory, while he/she is using the pictures.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Real reading begins only when a child begins to say the words exactly as they are printed on the page.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

A child must first know the letters of the alphabet and the sounds of the letters of the alphabet, before he/she begins to write words, sentences and stories.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

A child should learn to neatly print the letters of the alphabet before trying to write words, sentences and stories.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

A child should practice a lot to copy words, then sentences and finally stories before trying to write on his/her own.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

A child should be encouraged to write only easy words and short sentences when he/she begins to write.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

A child's early scribbles are related to later development in writing words, sentences and stories.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

A child needs workbooks to learn how to write.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

A child can begin to write before he/she has learned the correct spelling of the words.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

You SHOULD correct your child if he/she writes "kt" for the word "cat."

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

A child's confusion of "b" and "d" or "p" and "q" in printing indicates a major problem.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

A child can begin to write (words, sentences and stories) before he/she knows how to read.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Learning to read and learning to write are similar to learning to talk, because children learn these skills gradually.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Only gifted children learn to read and write before receiving formal instruction in preschool (kindergarten) or primary (elementary) school.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Reading to, and with children, helps them learn to write.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Children learn important things about reading and writing before they begin formal reading programs at preschool (kindergarten) or primary (elementary) school.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Talking to children helps them learn to read and write.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Taking children on outings helps them learn to read and write.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Having children pretend to write grocery lists with you helps them learn to read and write.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Reading to children helps them learn to read and write.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Schools should be totally responsible for teaching children to learn to read and write.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

It is very important that children see their parents reading and writing.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Children have to be a certain age before they can begin to learn to read and write.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

Children need training in hand-eye coordination and how to recognize shapes before they begin to learn to read and write.

- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

#### **RESOURCES AND ACTIVITIES AT HOME**

**The following are questions about resources in your home and your literacy activities.**

Estimate how many children's books you have in your home.

- |                             |  |
|-----------------------------|--|
| <input type="radio"/> 0     | <input type="radio"/> 31-40  |
| <input type="radio"/> 1-5   | <input type="radio"/> 41-50  |
| <input type="radio"/> 6-10  | <input type="radio"/> 51-60  |
| <input type="radio"/> 11-15 | <input type="radio"/> 61-70  |
| <input type="radio"/> 16-20 | <input type="radio"/> 71-80  |
| <input type="radio"/> 21-25 | <input type="radio"/> 81-90  |
| <input type="radio"/> 26-30 | <input type="radio"/> More than 90. How many? <input type="text"/> |

In a typical week, how often do you read to your child during **bed time**?

- |                               |   |
|-------------------------------|---|
| <input type="radio"/> Never   | <input type="radio"/> 5 times   |
| <input type="radio"/> Once    | <input type="radio"/> 6 times   |
| <input type="radio"/> 2 times | <input type="radio"/> 7 times   |
| <input type="radio"/> 3 times | <input type="radio"/> More than 7 times. How many? <input type="text"/> |
| <input type="radio"/> 4 times |   |

In a typical week, how often do you read to your child during times **other than bed time**?

- |                               |   |
|-------------------------------|---|
| <input type="radio"/> Never   | <input type="radio"/> 5 times   |
| <input type="radio"/> Once    | <input type="radio"/> 6 times   |
| <input type="radio"/> 2 times | <input type="radio"/> 7 times   |
| <input type="radio"/> 3 times | <input type="radio"/> More than 7 times. How many? <input type="text"/> |
| <input type="radio"/> 4 times |   |

When reading a story to your child, how interested does he/she appear to be?

- ☐ Not interested at all
- ☐ Slightly interested
- ☐ Quite interested
- ☐ Very interested
- ☐ Don't know

What are the **five** most important things you are doing to help your child learn to read and write in English? Please exclude homework from school.

1	<input type="text"/>
2	<input type="text"/>
3	<input type="text"/>
4	<input type="text"/>
5	<input type="text"/>

## CONTACT



Would you like to be entered into the draw for the **gift vouchers**?

- ☐ Yes  
☐ No

Would you like to receive a **report** with a summary of the findings at the end of the study?

- ☐ Yes  
☐ No

If you selected "yes" to either of the above two questions, enter a valid email address.

Your name (**optional**)

## APPENDIX D: RECRUITMENT EMAIL TO PRINCIPALS

Kia ora koutou principals,

I hope the new academic year has started well for you.

I would like to invite all parents with children under the age of seven, to participate in a literacy research project at the University of Canterbury. The aim of this doctoral study is to learn more about New Zealand parents' home literacy beliefs and activities. These findings will be used to further improve home-school partnerships, particularly to raise literacy outcomes for emergent and early readers.

Could your New Entrant and Years 1 - 2 teachers distribute the attached flyer, please? Emailing, handing out a printed copy or publishing it in your school's newsletter or class blog, would all be perfectly acceptable ways of sending out the invitation (or any other method that is convenient for the teachers). That would also be the extent of the teacher's involvement as interested parents should email me directly for a link to the online questionnaire.

A summary of the findings will be sent to you at the end of the study.

The study is being undertaken under the supervision of Professor John Everatt (Specialist in Literacy, Dyslexia and Special Educational Needs) and Dr. Jo Fletcher (Senior Lecturer in Literacy Education). Ethical approval for this study was granted by the University of Canterbury's Educational Research Human Ethics Committee (Reference Number 2014/52/ERHEC).

I would be happy to provide you with more information, so don't hesitate to contact me if you have any questions.

Thank you for your time and support in advance.

Kind regards,  
Erik du Toit  
*PhD Candidate*  
*Language and Literacy Research Lab*  
*School of Teacher Education*  
*College of Education*  
*University of Canterbury*  
*Private Bag 4800*  
*Christchurch 8140*  
*New Zealand*  
Email: [erik.dutoit@pg.canterbury.ac.nz](mailto:erik.dutoit@pg.canterbury.ac.nz)

## APPENDIX E: RECRUITMENT INVITATION TO PARENTS

### Reading and Writing are IMPORTANT!



<http://bearange.club/gallerydown-family-reading-together.htm>

How do you help your child learn to read and write?

Please fill in an **online questionnaire** (15-25 min) as part of my research.  
Easy access to the questionnaire by phone, tablet, PC or Mac.

Five participants will win **\$50 gift vouchers**.  
All participants will receive a **report** including reading and writing **tips**.

Contact: [erik.dutoit@pg.canterbury.ac.nz](mailto:erik.dutoit@pg.canterbury.ac.nz)



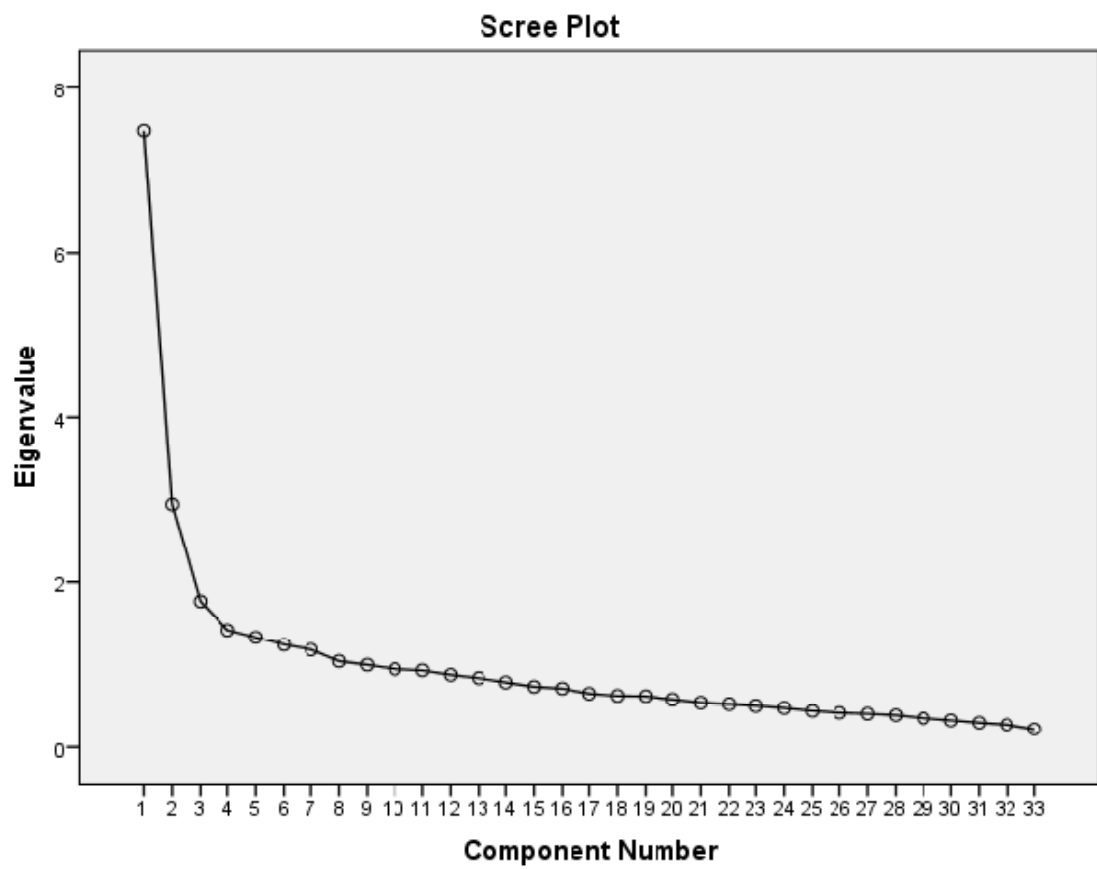
<http://whirlbooks.blogspot.com/2014/06/do-you-want-your-child-to-read.html>

5 Feb 2016

## APPENDIX F: INDEPENDENT VARIABLES INTERCORRELATIONS

	PPLIS	EDU2	Income 50K	PGender	PAge	Immigration Status	L1Eng Other	HelpMonth	CGender	ChildAge Month
PPLIS	1.00	-.17	-.15	-.16	-.14	.46	.49	-.33	-.09	.01
EDU2	-.17	1.00	.10	-.10	.20	.06	.06	.00	-.05	.00
Income50K	-.15	.10	1.00	.03	.26	-.10	-.21	.10	.09	.01
PGender	-.16	-.10	.03	1.00	-.05	-.19	-.24	.16	.03	.09
PAge	-.14	.20	.26	-.05	1.00	-.06	-.20	.19	.05	.33
ImmigrationStatus	.46	.06	-.10	-.19	-.06	1.00	.73	-.25	-.07	-.08
L1EngOther	.49	.06	-.21	-.24	-.20	.73	1.00	-.32	-.07	-.09
HelpMonth	-.33	.00	.10	.16	.19	-.25	-.32	1.00	-.03	.34
CGender	-.09	-.05	.09	.03	.05	-.07	-.07	-.03	1.00	-.08
ChildAgeMonth	.01	.00	.01	.09	.33	-.08	-.09	.34	-.08	1.00

## APPENDIX G: FACTOR ANALYSIS SCREE PLOT



## APPENDIX H: ROTATED FACTOR SOLUTION

	Component					
	1	2	3	4	5	6
Q26	.77	.10	.11	.10	-.02	.13
Q29	.74	.12	.16	.07	.09	.12
Q24	.69	-.03	.12	.10	.05	.09
Q25	.66	.24	.07	.19	.02	.05
Q27	.65	.13	.15	.13	-.09	.23
Q31	.54	.13	.01	.04	-.07	-.14
Q28	.46	-.01	.32	.32	.13	-.04
Q3	.07	.75	-.07	.10	.10	-.03
Q9	.11	.67	.05	-.20	.10	.14
Q17	.13	.65	.25	.18	.07	.02
Q15	.14	.61	.39	-.01	.08	.19
Q19	.07	.59	.17	.11	.13	.29
Q20	.05	.50	.37	.17	.00	-.04
Q14	.19	.47	.37	-.03	.39	-.03
Q2	.17	.45	-.13	-.06	.44	-.20
Q18	.35	.37	.22	.07	-.23	-.02
Q6	-.26	-.33	-.24	-.32	-.08	.28
Q32	.16	.07	.69	.13	.04	-.07
Q33	-.21	.18	.58	-.10	-.08	.22
Q23	.21	.02	.58	.02	.04	.04
Q13	.10	.26	.53	.04	.45	.18
Q30	.22	.30	.52	.11	-.01	-.17
Q11	.27	.23	.41	.03	.32	.11
Q7	.13	.13	.39	.36	-.23	-.24
Q10	.13	.04	-.03	.76	.07	.24
Q8	.25	-.03	.26	.66	-.04	-.06
Q16	.40	.12	-.08	.40	.08	.03
Q1	.04	-.25	-.03	-.17	-.63	-.04
Q12	.00	.17	.40	.03	.52	.37
Q22	.15	.16	.05	.33	-.40	.17
Q4	-.14	-.02	.00	-.06	-.09	-.58
Q21	.13	.32	.12	.03	-.23	.52
Q5	.37	.07	-.15	.36	.10	.42

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 14 iterations.

## **APPENDIX I: ITEMS INCLUDED IN EACH FACTOR**

### **Factor 1: Parent-as-Model**

- 26. Talking to children helps them learn to read and write.
- 29. Reading to children helps them learn to read and write.
- 24. Reading to, and with children, helps them learn to write.
- 25. Taking children on outings helps them learn to read and write.
- 27. Children learn important things about reading and writing before they begin formal reading programs at preschool (kindergarten) or primary (elementary) school.
- 31. It is very important that children see their parents reading and writing.
- 28. Having children pretend to write grocery lists with you helps them learn to read and write.

### **Factor 2: Parent-as-Teacher**

- 3. A child needs workbooks and basal readers (books with stories, pictures and questions) to learn how to read.
- 9. You need to check your child's understanding by asking him/her questions, after every story you have read.
- 17. A child needs workbooks to learn how to write.
- 15. A child should be encouraged to write only easy words and short sentences when he/she begins to write.
- 19. You SHOULD correct your child if he/she writes "kt" for the word "cat."
- 20. A child's confusion of "b" and "d" or "p" and "q" in printing indicates a major problem.
- 14. A child should practice a lot to copy words, then sentences and finally stories before trying to write on his/her own.

## APPENDIX J: PPLLIS MEAN FOR EACH LANGUAGE

